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Alcan Aluminium Limited
Annual Report 1976



Alcan Annual Report 1976

10-K Report

A copy of the Company's current annual 10-K Report filed with the United States Securities and Exchange Commission will be available to shareholders after 1 April upon written request to the Secretary of the Company.

Annual Meeting

The Annual Meeting of the shareholders of Alcan Aluminium Limited will be held on Thursday 17 March 1977, at 10 a.m. in the Chateau Champlain Hotel, Montréal.

Stock Exchanges

The common shares of Alcan Aluminium Limited are listed on the Montréal, Toronto, Vancouver, New York, Midwest, Pacific, London, Paris, Brussels, Amsterdam, Frankfurt, Basel, Geneva, Lausanne and Zurich stock exchanges.

Preferred shares: Montréal, Toronto and Vancouver stock exchanges.

Transfer Agents

Common shares: National Trust Company, Limited, Montréal, Toronto, Winnipeg, Regina, Calgary, Vancouver. Mellon Bank, N.A., Pittsburgh. Citibank, N.A., New York. Morgan Grenfell & Co. Limited, London.

Preferred shares: National Trust Company, Limited, Montréal, Toronto, Calgary, Vancouver.

Registrars

Common shares: The Royal Trust Company, Montréal, Toronto, Winnipeg, Regina, Calgary, Vancouver. Pittsburgh National Bank, Pittsburgh. Manufacturers Hanover Trust Company, New York. The Royal Trust Company of Canada, London.

Preferred shares: The Royal Trust Company, Montréal, Toronto, Calgary, Vancouver.

Alcan Aluminium Limited

1 Place Ville Marie, Montréal, Canada
Mail: Box 6090, Montréal, Canada
H3C 3H2

Édition française

On pourra se procurer le texte français de ce rapport annuel en s'adressant au secrétariat de la Compagnie, case postale 6090, Montréal, Canada H3C 3H2.

Definition of terms

In this report, all amounts are in United States dollars and all quantities are in short tons of 2,000 pounds, unless otherwise stated.

'Subsidiary' indicates a company owned directly or indirectly more than 50 per cent whereas 'related company' indicates a company owned 50 per cent or less.

The term 'Alcan' refers to the parent Alcan Aluminium Limited itself, or to one or more subsidiaries according to the context.



Front cover: Versatile aluminum is rustproof, corrosion resistant and an excellent conductor of heat and electricity. It is light, yet certain alloys attain very high strength. Aluminum can also

be highly reflective, as shown by our cover photo of the interplay, on a coil, of reflected sky, grass and flowers.

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Alcan...

Alcan Aluminium Limited is a Canadian company formed in 1928 and engaged, through its subsidiaries and its investments in related companies, in all phases of the aluminum business on an international scale.

These operations, large and small, and ranging from the mining of the ore bauxite to the manufacture of aluminum end products, are conducted in some 35 countries, with about 75 per cent of the total assets located in Canada, the United States, the United Kingdom and Continental Europe. With the operations in other continents, they make Alcan one of the major enterprises in the aluminum industry.

The Company is publicly owned. It has about 43,000 shareholders mainly in Canada, the United States and Europe, and 60,000 employees.

Highlights of 1976

Year ending 31 December	1976	1975	1974
Shipments of all aluminum products ('000 tons)	1,515	1,402	1,662
Shipments of fabricated products ('000 tons)	953	785	1,018
Sales of fabricated products (U.S. \$ millions)	\$ 1,701	\$ 1,370	\$ 1,489
Sales and operating revenues (U.S. \$ millions)	\$ 2,656	\$ 2,302	\$ 2,412
Net income (U.S. \$ millions)	\$ 44	\$ 35	\$ 169
Income per common share (excl. extraord. gain)	\$ 1.14	\$ 0.65	\$ 4.11
Dividends per common share	\$ 0.40	\$ 0.90	\$ 1.20
Capital expenditures (U.S. \$ millions)	\$ 138	\$ 208	\$ 268
As at 31 December			
Total assets (U.S. \$ millions)	\$ 3,090	\$ 3,012	\$ 2,979
Long-term debt (U.S. \$ millions)	\$ 837	\$ 971	\$ 881
Common shareholders' equity (U.S. \$ millions)	\$ 1,268	\$ 1,110	\$ 1,090
Book value per common share	\$ 31.34	\$ 31.36	\$ 31.41
Number of common shares outstanding (millions)	40.45	35.38	34.71
Number of common shareholders	43,142	46,588	47,978
Shares held by residents of Canada (%)	52.5	42.0	45.4
Shares held by residents of U.S.A. (%)	33.6	43.1	44.1
Shares held by others (%)	13.9	14.9	10.5
Number of employees (thousands)	60	61	64

Report to the Shareholders

In the international aluminum industry, 1976 was a year of partial recovery from the severe economic recession which the industrialized world experienced in 1975. Demand for primary aluminum in the non-Communist countries increased by about 25 per cent over the preceding year, as fabricators and manufacturers experienced a recovery in their own product sales and stepped up their purchases of metal. Surplus inventories of aluminum (in all forms throughout the industry) appear to have been reduced by about one million tons from the record level of two million tons at the start of 1976. Basic aluminum prices in most markets showed considerable improvement, permitting some relief from the continuing upward pressure of costs of materials and services.

Due to the heavy financial impact of a five and a half month strike at the Aluminum Company of Canada's main smelter operations in Québec, Alcan did not share fully in the improvement in volume and profitability experienced by many aluminum producers. Consolidated net income of \$44.0 million in 1976 (\$1.14 per share) showed only a modest improvement over the recession year of 1975 when \$35 million was earned (\$1.01 per share), including an extraordinary gain of \$12.4 million (\$0.36 per share).

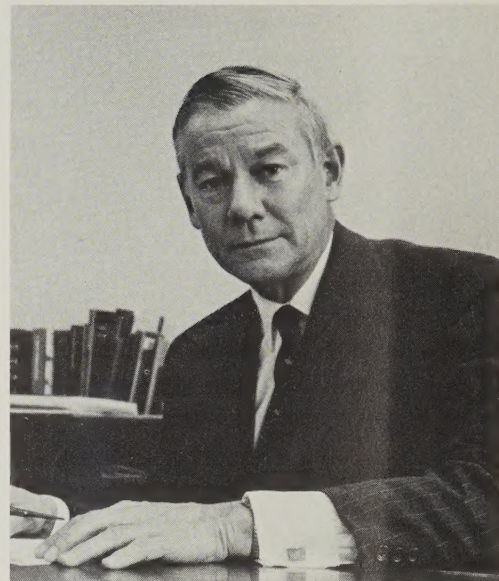
By drawing down surplus inventories built up in 1975 and increasing purchases of metal, consolidated sales of fabricated products recovered more than 20 per cent over 1975. However, with reduced production of primary metal, sales of primary ingot declined. Sales of aluminum in all forms, primary ingot and fabricated products, rose 8 per cent from 1,402,300 tons in 1975 to 1,515,100 tons in 1976.

As the year progressed, there

was a marked change in the trend of earnings within the Group, as described more fully in the body of this report. In the first half of the year the Aluminum Company of Canada showed an improved earnings trend, but consequent upon the strike suffered a severe loss in the second half. In contrast, Alcan's other operations, taken as a whole, contributed little to profitability during the first half but, benefitting from improved markets, showed strongly improved earnings in the second half. This improvement included a welcome recovery in Continental Europe and the United Kingdom, a much lower loss by a related company in Japan and continued strong earnings in Latin America, especially in Brazil. Results in Australia, India and Southeast Asia were also encouraging. The alumina operations in Jamaica, however, continued to suffer losses.

The financial structure of the Group has been strengthened by the successful issue of five million new common shares in July. The resulting increase in the equity base, combined with a reduction in debt, substantially increases Alcan's ability to proceed with the modernization and expansion programs which the Company wishes to undertake.

Business activities in Canada during the past year have been conducted in an atmosphere of uncertainty brought about by increasing and changing Government regulations, labour unrest and new political developments in Quebec. Alcan's operations in Canada have been subject to controls on prices, profit margins, dividends and employee compensation. Profits and dividends were well below permissible levels but the controls on compensation contributed in part to the unsettled labour conditions. The labour agreement reached in November



Nathanael V. Davis

1976 with the Fédération des Syndicats du Secteur Aluminium (FSSA) in Québec was based upon the mediator's recommendation and has been submitted to the Anti-Inflation Board for approval.

We are pleased to be able to report that the return to work has occurred in a constructive atmosphere and that the facilities have been brought back into production ahead of schedule. Shortly before this settlement, however, a strike was called by a different union at Shawinigan, where 70,000 tons of operating primary capacity and some fabricating facilities were idled for three months. The issues have recently been resolved and the employees are returning to work.

Looking ahead on the Canadian scene, Alcan has plans to start a staged smelter expansion and rebuilding program in Québec when conditions permit. We believe such a program would be desirable from the Company's viewpoint and would contribute significantly to economic development in Québec. Before embarking on this program which would require heavy capital commitments over an extended



Paul H. Leman

period, Alcan expects to have full discussions with the new Québec Government. We believe that, as a result of such discussions and with a renewed dedication on the part of all concerned to bring about improved industrial relations, Alcan will be able to achieve continuity and success in its Québec operations.

We enter 1977 expecting a modest growth in demand for aluminum based upon current forecasts of an average growth of four to five per cent in GNP in the major countries. Building on a strong worldwide base and on the recently commissioned rolling mills in Canada, the United States, Germany and Brazil, we should be in a position to benefit from the market opportunities which lie ahead. In the primary aluminum sector reference has been made to our longer range plans for Canadian smelting. Outside Canada incremental smelter expansion opportunities exist in Britain, Australia and Brazil. The Brazilian expansion was begun in 1976 and an expansion in Australia is being planned. Reference to our new bauxite source in Brazil is made elsewhere in this report.

Alcan's structure encompasses operations in many countries. Some units are largely self-contained but the larger segment comprises geographically diversified raw material sources supplying our smelters in Canada and overseas which, in turn, provide primary metal to a large number of fabricating operations located in world markets. Alcan being multinational in character, it seems appropriate to mention the adoption by the OECD on 21 June, of guidelines for multinational enterprises. These guidelines, which take into account the problems which can arise because of the international structure of such enterprises, establish standards for their activities in the different member countries. Alcan welcomes them as a positive statement of what is good practice for multinational companies, and as part of a package of declarations establishing an acceptable framework of reciprocal rights and responsibilities between multinational enterprises and host governments.

These guidelines are entirely consistent with Alcan's own long-standing philosophy, and the Company will comply with them not only in OECD member countries but in all countries in which it has subsidiary operations. In particular, the content of this report complies with the guidelines in regard to the disclosure of information.

Directors and Management

In April, the Board of Directors suffered the loss, through death, of Dr. John J. Deutsch, an eminent Canadian who had served since 1973. In October, P. John Elton submitted his resignation as Alcan's area general manager for the United Kingdom and Scandinavia to enter other business, and as a Director effective at the March annual meeting.

Mr. Elton had made a notable contribution to the development of Alcan's interests in his area of responsibility. Patrick J. J. Rich, a regional executive vice president, was appointed to the Board in May.

Two executive vice presidents, N. Stewart Crerar and James W. Cameron, have retired from active duty after long and valued service. Mr. Cameron has agreed to remain a member of the Board. Eric A. Trigg, a director and senior officer, has been appointed regional executive vice president, Middle East, Asia and South Pacific, succeeding Mr. Cameron.

Many of the Company's personnel put forth extraordinary efforts under trying conditions during the past year and deserve commendation. As we enter 1977 with most of our productive facilities back in operation, we look forward to improved operating efficiencies and the opportunity to earn a far better financial return on the Company's assets.

Nathaniel V. Davis

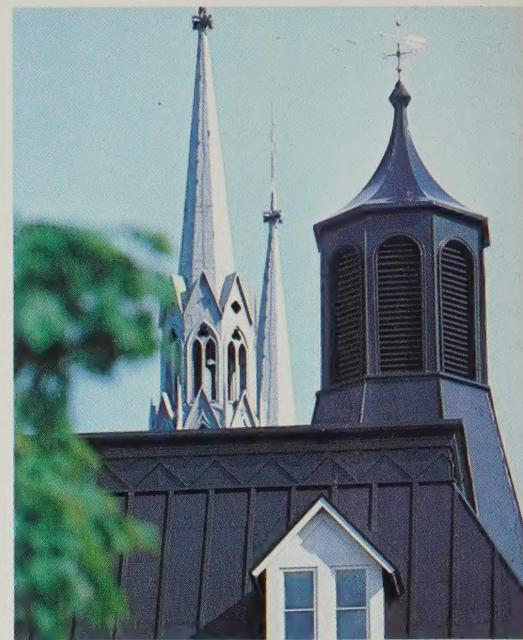
Chairman of the Board

Paul Leman

Montréal

2 February 1977

President



From top left, clockwise: Bank of Canada building, Ottawa, uses aluminum extrusions to frame its 20,000 m² of curtain wall.

Historically important old buildings, restored with aluminum roofing and curtain wall, update the past for present use.

Warm anodic-brown tones of aluminum windows, doors and vents enhance the sandy-hued exterior of Place Desjardins, Montréal.

Aluminum siding comes in many shapes and colours. It is easy to install, economical, long lasting and good looking.



Review of Operations • Alcan Worldwide

As in previous years, the 1976 operating and financial results of Alcan Aluminium Limited arose from the activities of consolidated subsidiaries in 25 countries, carried out under widely varying circumstances, together with those of related companies, in at least as many countries, in which Alcan has an investment of 20-50 per cent. The financial results of the related companies are included in the consolidated statements on an equity accounting basis.

This review of operations presents first a consolidated summary by functions. A detailed analysis by regions and areas follows, reflecting the group's corporate and management structure.

Smelting

Due largely to strikes, Alcan's Canadian smelter production declined to 543,000 tons in 1976 from 838,000 tons in 1975 and 963,000 tons in 1974. Smelting subsidiaries in the United Kingdom, Australia, India and Brazil increased their total output from 295,000 tons in 1975 to 329,600 tons last year, reaching full capacity production in the second half, except in India. The combined annual capacity of these subsidiaries is now 375,000 tons.

The related smelting companies in Japan, Norway, Spain and Sweden had all reduced their production in 1975 and early 1976 for recessionary reasons but their operating rates were stepped up as 1976 progressed, except in Japan where government directions involved prolonged restraint. Their total production in 1976 was 800,500 tons against 885,000 tons the preceding year. Only the Norwegian producer is a supplier to the Alcan system, providing 177,000 tons in 1976.

Fabricating and Sales

Markets for semi-fabricated products showed a strong upturn in most countries served by Alcan subsidiaries, and consolidated sales of these products rose by 21 per cent from 785,400 tons in 1975 to 953,300 tons, still below the record level of 1,018,000 tons in 1974. However, due in part to the low level of ingot sales, the shipments of fabricated products were 63 per cent of total sales.

Shipments of primary ingot products dropped from 616,900 tons in 1975 to 561,800 tons in 1976 due to the lower level of spot sales in the first half and to an inability to produce certain ingot products during the strikes at Canadian smelters in the second half. Grouped by principal markets, consolidated sales were, in thousands of short tons:

	1972	1973	1974	1975	1976
Canada	195	235	248	215	232
U.S.A.	416	480	452	325	388
U.K.	210	265	287	220	230
EEC (less U.K.)	172	208	207	164	220
Latin America	111	113	124	121	127
All Others	347	375	344	357	318
	1,451	1,676	1,662	1,402	1,515

The 8 per cent increase in total consolidated sales to 1,515,100 tons, despite the production losses, was achieved through a reduction of 150,000 tons in group inventories in 1976, and by some increased purchases of primary ingot.

Alcan has long-term purchase commitments for considerable quantities of primary aluminum. It may also make additional purchases at certain periods to balance its own supplies with customer needs and it also purchases scrap aluminum which is recycled in secondary ingot or fabricated form. Because of the abnormal circumstances of 1976, purchases of all types from all sources increased to 519,000 tons,

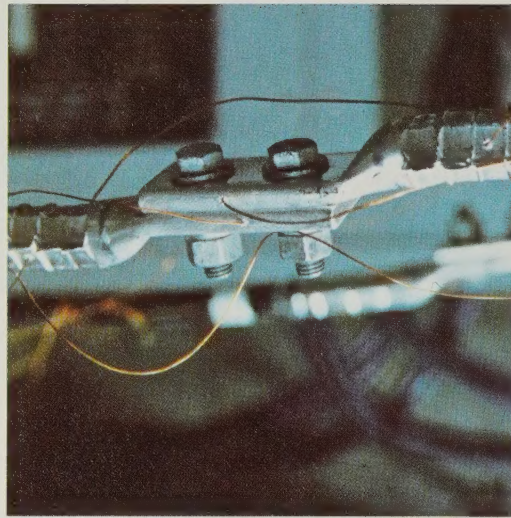
from 391,000 tons in the recession year of 1975 and 562,000 tons in the buoyant year of 1974. Alcan's obligations to repay 'borrowed' metal in kind in 1977 and later are less than 20,000 tons, provision for which has been made by reduction of the 1976 year end inventory.

Within the Group, the normal conduct of the business involves many of the subsidiary and related companies buying from and selling to each other, mostly across national borders. Prices charged in these transactions are intended to reflect realistic market values.

Raw Materials

Alumina requirements for group smelters and for sale to related companies were 18 per cent lower than in 1975. Company-owned alumina plants in Canada and Jamaica and a related company in Australia remained the principal sources of supply. Supply from Australia was maintained at the previous year's level, but strikes at the Canadian and Jamaican alumina plants reduced availability from those sources by 38 per cent compared to 1975. The shortfall was made up by tolling of bauxite and purchases of alumina from third parties.

The alumina plants at Jonquière, Québec continued to obtain bauxite from Guinea, Guyana, Sierra Leone and Surinam. Alumina for use at the Kitimat smelter in British Columbia was obtained mainly from the Gladstone plant of Queensland Alumina Limited in Australia, in which Alcan is a participant. Only 2.5 per cent of the production of the Jamaican plants was directed to Canada last year but this is expected to move closer to 7 or 8 per cent in 1977. The balance is supplied to other subsidiary and related companies.



From top left, clockwise: Precoated aluminum jacketing protects insulated lines, equipment, tanks, ducts and piping at oil refinery.

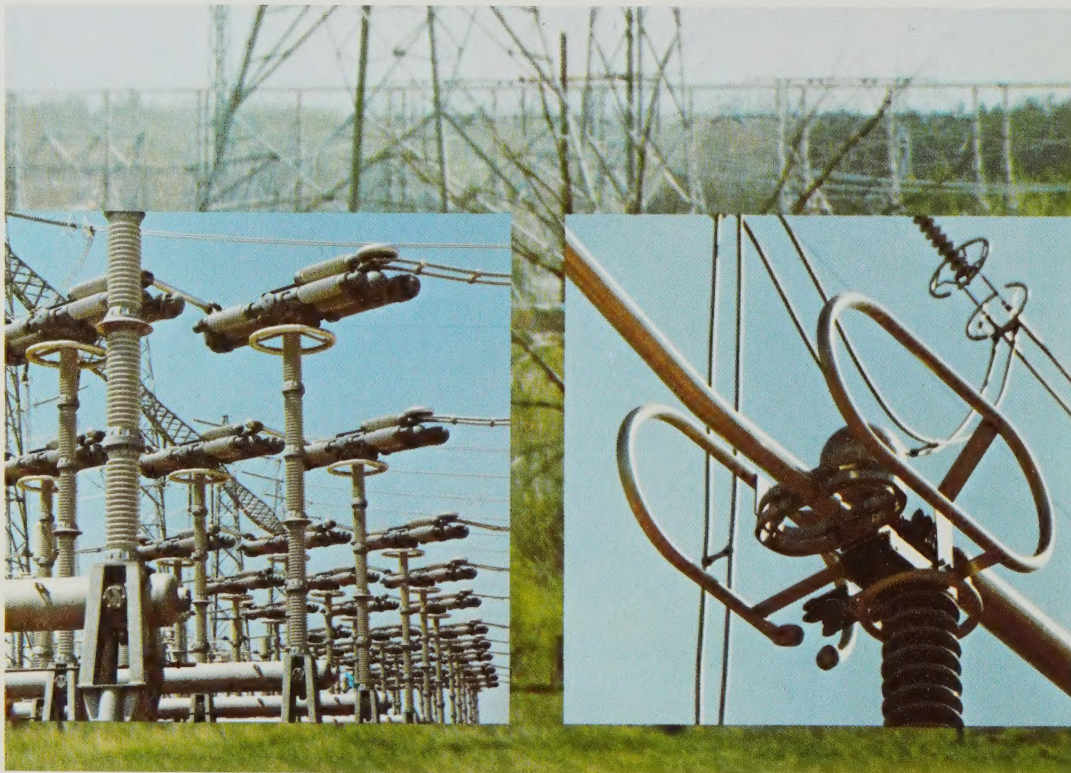
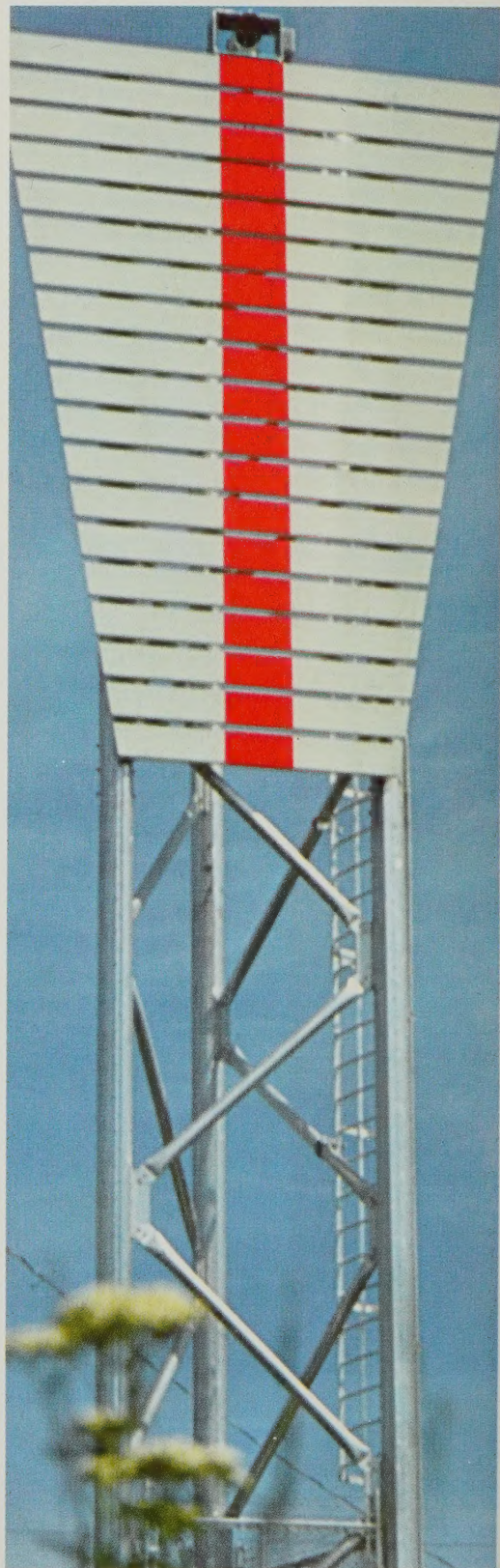
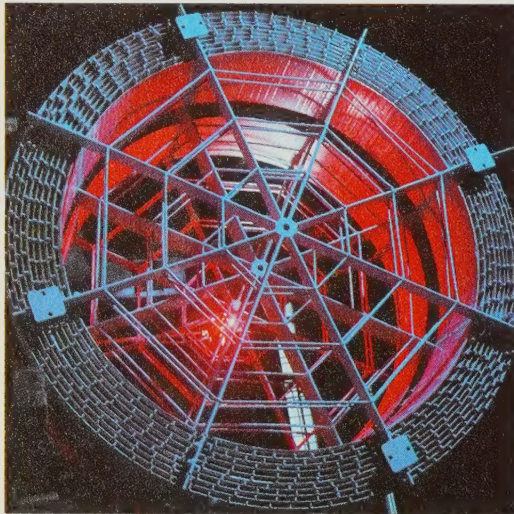
Continued thorough testing of aluminum house wiring by government and other bodies in Canada and elsewhere, and the metal's proven performance in home wiring, are increasing its acceptance for this application.

Rectangular pattern of curtain wall on this modern building in Halifax, Nova Scotia, creates a pleasing contrast with the softer contours of the natural environment.

Radar range towers mark the way along the entrances to Canada's waterways. The corrosion-resistant aluminum tower and panels have proved virtually maintenance-free in the heavily salt-laden air of the seacoasts.

Tubular aluminum bus bar (two photos), capable of carrying the maximum amount of energy for minimum overall cost, also help create 'low-profile', ecologically more attractive utility switching stations.

Computer-designed inductance coils of aluminum wire protect conductors by limiting the current which can flow in an electrical circuit under short-circuit conditions.



Operations • North America and Caribbean Region

Alcan's largest regional group of operations, accounting for 62 per cent of consolidated fixed assets and about 60 per cent of sales in normal years, comprises Aluminum Company of Canada, Ltd and its subsidiaries. This subsidiary group incurred a consolidated loss of \$17.2 million in 1976, compared with a profit of \$0.5 million in 1975, the loss being due to the effects of the prolonged strike and to other labour disturbances. The estimated cost of the strikes in the Canadian smelters, apart from any profit lost through



loss of sales, was \$90 million before tax. This included the fixed charges of idle plant, extra costs of purchased metal and some \$30 million

in start-up costs absorbed in the second half of the year, which figure is expected to cover all the start-up costs of the potlines closed by strikes, including that at Shawinigan which ended on 30 January 1977.

Operations in Canada, the United States and the Caribbean are carried out by four principal organizations within Aluminum Company of Canada, Ltd, namely, Alcan Smelters and Chemicals Ltd, Alcan Canada Products Limited, Alcan Aluminum Corporation and Alcan Jamaica Limited.

Canada

Alcan Smelters and Chemicals Ltd

This company is responsible for Canadian smelter operations with total annual capacity of 985,000 tons in the provinces of Québec and British Columbia supported by their own hydroelectric power supply, plus fluorspar mining in the province of Newfoundland. The alumina capacity in Québec, about 1,400,000 tons per year, is sufficient to supply the Québec smelters. This company is also a major producer and seller of inorganic chemicals.

When the year 1976 opened, smelters in Canada were operating at a curtailed annual rate of about 800,000 tons, just over 80 per cent of capacity, as they had been for the preceding eight months. Despite these cutbacks, the company's surplus inventories of primary aluminum had climbed to high levels during the 1975 period of low shipments, and continued to rise in the early weeks of 1976. With the resumed growth in demand, inventories started to decline, but at the onset of strikes in three Québec smelters on 3 June, the operating rate was

still at 80 per cent.

The smelter strike at Jonquière (Arvida Works), Alma and Beauharnois, occurring after the previous union contract expired on 31 May, was the first at these locations in 19 years, and lasted for five and a half months until 15 November. It brought serious and irrecoverable economic loss to the employees and the communities involved, and severe financial loss to the company. The issues involved, and the efforts to obtain an earlier settlement, were described in a communication to shareholders dated 5 November.

The eventual strike settlement was based on the report of a special mediator appointed by the Québec government. It provided for a 30-month contract from the date of signing and it involved increases in wages averaging 8.7 per cent in the first ten months, an additional 9.5 per cent in the second ten months, followed by a further four per cent in the final ten months. The contract is subject to review by the Canadian Anti-Inflation Board. The loss of production at these three loca-

tions (annual capacity 610,000 tons) was approximately 250,000 tons, assuming pre-strike levels of production would have remained unchanged during the strike period.

Labour disruptions also occurred at Alcan's two other smelters in Canada. In June, there was an illegal withdrawal of work by a separate union at Kitimat, British Columbia, which lasted for 18 days. For this period the smelter was kept in operation by staff members and other employees, and there was no loss of production. In September, the operating rate at Kitimat was raised to close to its rated capacity of 295,000 tons per annum.

On 3 November, a third union group called a strike, when it was legally in a position to do so, at the company's fourth Québec smelter, at Shawinigan. This facility, which has an annual capacity of 91,000 tons, had remained in operation during the other disruptions. The Shawinigan strike, in which inter-union rivalries were involved, ended on 30 January 1977 with settlement terms substantially unchanged from

Operations • North America and Caribbean Region

Canada (continued)

those at the others smelters. The Shawinigan smelter is now returning to its previous level of production, about 70,000 tons per annum.

The start-up of the three Québec smelters after the settlement of 15 November proceeded in satisfactory fashion and faster than anticipated, thanks to the cooperation of employees and the technical methods employed. Operations were returned to pre-strike levels by year end, and authorization was given in January to re-start four potlines in Arvida Works which had been idle since 1975. By the end of April 1977, the operating rate in the Canadian system is expected to be 940,000 tons per annum, or 95 per cent of capacity.

Apart from returning its operations to optimum efficiency and striving to restore the industrial relations climate in 1977, the Smelter Division intends to continue its program, interrupted last year, to improve the environmental and working conditions in its older smelters. This involves a capital expenditure of the order of \$38 million in 1977.

The company also proposes to undertake a progressive rebuilding program for such smelters, but has not yet made a start in the light of recent financial and industrial conditions. The program would include the construction of new smelter capacity in the Saguenay region of Québec, and upon its completion other capacity would be closed down progressively for rebuilding. If implemented in full, the building and rebuilding program, which could also include fabricating facilities in the same area, would, over a long period, effect an increase in smelting capacity of some 300,000 tons, with power to be available from the company's existing hydroelectric plants.

The program would provide substantial benefits in better operating efficiencies, economic gains for the region and higher environmental standards both inside and outside the smelters. However, the capital investment program would be very large and its implementation, in part or in full, would be governed by the prospects for adequate financial return and for reasonable assurances in the fields of industrial and governmental relations.

In the Saguenay district, 2,400 acres of land have been purchased for a new site on which to commence the rebuilding program and in 1977 it is expected that some \$12 million will be spent on the necessary engineering studies and planning.

Alcan Canada Products Limited

This company is responsible for operating 27 manufacturing plants and 23 distribution centres across Canada, and is the largest supplier of semi-fabricated and finished aluminum products and of ingot to the Canadian domestic market.

Its sales in 1976 increased by 8 per cent to 234,000 tons, including 7,500 tons of fabricated products sold in export markets. Profits from these activities increased in 1976 over those of 1975.

The year began strongly but demand slackened in the second half. While the company believes it retained market share, and maintained supplies of metal to customers, its fabricating operations were adversely affected as many operations designed to utilize molten metal from the smelter were forced by the smelter strike to switch to metal in ingot form, which increased costs.

With the commissioning of a second high-speed cold-rolling mill, rolling capacity at Kingston Works increased to 150,000 tons a year. This mill, together with its continu-

ous heat-treating line, greatly increases the company's ability to produce light-gauge sheet for a variety of markets.

Other important developments included extension of capabilities in continuous casting and rolling at Jonquière, Québec. The company has concentrated in recent years on the development of the continuous casting and rolling process at the smelter site, and significant progress has been made in both process design and product range.

Expansion also continued in the company's Building Products Division. Housing starts in Canada were at a good level during the year, which resulted in satisfactory demand for such aluminum building materials as windows, doors, siding and rain-water goods.

The Wire and Cable Division announced its intention to construct a new cable mill in the province of Québec to enable it to meet anticipated cable requirements for the James Bay power project. This division also continued its drive to improve and simplify connectability of aluminum wire and cable with equipment and service boxes, resulting in the development of the 'Coppertail' connector which improves the reliability of electrical connections and reduces the space needed in which to make them.

Increasing emphasis on efficient transport is leading to greater use of aluminum as Canada's stock of rail cars is increased and modernized. Early 1976 saw the delivery of 1,600 aluminum grain hopper cars of Alcan design, and the year end marked the delivery of 20 production-model rotary-dump coal-cars, prototypes of which were jointly developed by Alcan and Procor Limited.

United States

Alcan Aluminum Corporation is a wholly-owned United States company with an important market position in that country, operating fabricating plants and distribution outlets in 24 states.

In 1976, the U.S.A. continued to be Alcan's largest national market, with sales representing 25 per cent of the group's total sales dollars and 26 per cent of its tonnage. The recovery from the 1974-75 recession was especially gratifying after the sharp drop in sales during the recession of 1975.

Alcan Aluminum Corporation had a successful financial year, with all of its operations contributing to its record earnings. The second cold-rolling mill at Oswego, New York, was brought on-stream by Alcan Sheet and Plate Division with minimal start-up problems and, with

the upsurge in the sheet market, it provided the capacity for increasing sales to both existing and new customers. A joint research and development project with the Kingston, Ontario, research centre enabled the company to become an approved sheet supplier to the growing automotive market.

Alcan's Metal Goods service centres had another successful year, even though capital investment by the industrial community was less than anticipated. Sales of electrical conductor products increased but Alcan's cable divisions were hampered by rising costs and soft prices. The Alcan Metal Powders' business in 1976 was back to normal levels after dropping in the 1975 recession. Ingot sales in the United States were strong in the first half but were hurt in the second half by

the strike at the Canadian smelters. The results of Alcan Building Products were disappointing but the division's sales of windows and agricultural building products were most satisfactory.

Although the markets for building and construction products improved during 1976, their recovery lagged behind the overall economy in general. This is Alcan's largest market for aluminum products in the United States, and a program of restructuring, improved productivity, and new products places the building products division in a strong position to compete for the growth in residential construction materials anticipated in 1977. This recovery, plus the expected higher capital investments by industry, will help the company's overall business this year.

Caribbean

Alcan Jamaica Limited is responsible for operating Alcan's bauxite mining and alumina facilities in Jamaica. Reflecting lower customer demand, and a strike at one of the two alumina plants which resulted in a loss of production of 39,000 tons, total output was 841,000 tons of alumina in 1976. This tonnage represented 35 per cent of the Group's total alumina requirements for its own use and sales commitments. At year end the alumina plants were operating at a rate of 948,000 tons per annum.

In spite of the adverse impact

of the strike on production costs, and of the increased costs of wages and fuel oil, the 1976 loss was held to approximately the same level as that suffered in 1975. Cost-cutting measures taken by the company — including a 20 per cent reduction in the size of the work force — contributed to containing the 1976 loss.

The bauxite production levy imposed by the Government of Jamaica since 1974 results in taxation substantially higher than in other bauxite-producing countries, and is a continuing factor in the unprofitability of bauxite and alumina

operations in Jamaica.

Talks between the Government of Jamaica and Alcan regarding such questions as ownership of land and bauxite reserves, Government participation in the company's equity, and expansion of existing mining and processing facilities, continued during the year and are still in progress.

Other company operations in Jamaica and Trinidad continued to perform satisfactorily. These include bauxite trans-shipment and bulk storage, aluminum fabricating, and trading.



From top left, clockwise: High strength, better appearance: from a single extrusion, a dependable, one-piece boat mast.

A modular extruded shape which interlocks with itself provides two, three or four-sided shafts for attractive, rigid light poles.

For refrigerated transportation, meat is hung by means of disposable, hygienic straps to sliding aluminum hangers which combine lightness and strength at low temperatures.

Attractive aluminum fencing is easy to install and practically maintenance-free.

Bright colours, plus the warm anodic tones of aluminum, make an inviting workplace.

Lightweight and durable, aluminum containers provide a speedy service which adapts well to customers' shipping patterns.



Operations • Europe, Near East, Africa and Latin America Region

In the Europe, Near East, Africa and Latin America Region, Alcan conducts its operations and investments through three area groups.

The United Kingdom, Scandinavia and Ireland are in one group with the British subsidiaries directed by a holding company, Alcan Aluminium (U.K.) Limited. The area general manager is located in London.

In continental Europe, Alcan Europe NV is the holding company for fully-owned fabricating businesses in Belgium, France, Germany, Italy and Switzerland, the largest facilities being in Germany. It also holds a 25 per cent interest in the leading aluminum company in Spain. A trading company, Alcan S.A., Zurich, sells aluminum and related products in the Near East and North Africa. The area general manager is located in Geneva.



Because of continuing national differences in many sectors, including labour and social legislation, fiscal regulations and economic factors, the European units operate as separate national entities. However, international coordination, rationalization and allocation of resources between the national companies are carried out through the area general managers in London and Geneva.

In Latin America, the third major

area, the Company owns and operates a major aluminum enterprise in Brazil, with integrated operations from bauxite mining to aluminum end products, has substantial but smaller fabricating subsidiaries in four other countries, and holds a minority interest in Argentina's largest aluminum fabricator. Alcan is a partner in a major new bauxite enterprise in the Amazon region of Brazil. The area general manager for Latin America is located in Rio de Janeiro.

On the African continent, Alcan's interests are concentrated in fabricating subsidiaries in Nigeria and Ghana, minority participations in aluminum fabricating and silicon production enterprises in the Republic of South Africa, and membership in a major bauxite-mining consortium in the Republic of Guinea.

United Kingdom, Scandinavia and Ireland

United Kingdom

Alcan Aluminium (U.K.) Limited, through its subsidiary Alcan (U.K.) Limited, owns a modern smelter of 132,000-ton annual capacity in Northumberland and a coal-fired power plant, both of which started operations in 1972. It also holds a 75 per cent interest in a wide range of fabricating facilities through Alcan Booth Industries Limited. Together, these operations constitute one of the two principal enterprises in the U.K. aluminum industry.

In the U.K. in 1976, modest economic recovery, accompanied by an end of customers' inventory reductions, led to growth and improved trading conditions in the domestic market, while a rising level of world trade gave opportunities for

additional export business. During the year, prices for all aluminum products were substantially increased because of higher raw material and operating costs which resulted in part from the devaluation of sterling. These conditions, together with continuing good industrial relations, led to much improved consolidated results (after minority interests) for Alcan Aluminium (U.K.) Limited, particularly in the second half. In sterling terms the U.K. returned to a position of profit for the year, and in dollar terms showed a loss of \$3 million compared with a loss of \$14 million in 1975, but was significantly profitable in the fourth quarter. The prospect is for a further improvement in the profit position of this group.

In April the company increased its interest to a majority holding in Luxfer Holdings Limited, a leading company in the high-pressure gas cylinder business with plants in Nottingham, England, and Riverside, California.

During the year, the Lynemouth, Northumberland smelter stepped up its output in response to a higher level of primary ingot demand in the U.K. market. In the fourth quarter the smelter reached full effective capacity, maintaining high operating efficiencies and product quality. Alcan Booth Industries Limited had a much improved and profitable year.

New investment in U.K. plant and equipment was at a low level due to the difficult conditions which

United Kingdom *(continued)*

existed in 1975 and during the early months of the year but the outlook is for higher expenditure in 1977.

Scandinavia

The general recovery of the economies led to an increase in demand and eventually also to higher metal prices for the related companies in Scandinavia. Gränges Essem AB of Sweden, in which Alcan's participation is 20.84 per cent, increased its profitability over the preceding year. The company greatly strengthened its position in the extrusion market by acquiring Skandinaviska Aluminium Profiler AB (SAPA), Scandinavia's largest aluminum extruder.

After a difficult first half, Årdal og Sunndal Verk a.s. (ÅSV), of Norway, in which Alcan holds a 25 per cent of the equity, returned to profitable operations in the second half, though a loss was recorded in Alcan's accounts for the year. With metal inventories back to normal levels and operations at full capacity, a further improvement of the financial results is expected for the coming year. 1976 was the first year of ÅSV's new 10-year program of smelter modernization. Major projects on which work was started include a 32,000-ton potline at Årdal, a second coil-

coating line at Holmestrand and a plant for aluminum casting at Høyanger. Alcan has agreed to take its share of a capital increase by ÅSV, requiring an investment of about \$7 million early in 1977.

Republic of Ireland

In the Republic of Ireland, Unidare Limited, a diversified manufacturing and aluminum fabricating company in which a 25.5 per cent interest is held, had a reasonable year despite slow growth and high inflation in the Irish economy. During the year, the company maintained its traditional export markets and secured additional outlets in areas as diversified as Iceland, Fiji and Taiwan.

The proposal to construct an alumina plant on the Shannon River estuary, which had been postponed in late 1975 by Alcan and its two partners (Årdal og Sunndal Verk a.s. of Norway and Gränges Essem AB of Sweden), will be under review in 1977.

Continental Europe

With the significant recovery from economic recession in Western Europe, the demand for primary aluminum in 1976 grew by an estimated 25 per cent. The growth was particularly strong in the second and third quarters but showed hesitancy in the fourth. The industry's surplus

metal inventories declined and much of the continental smelting capacity which had been closed during the recession was restarted. Inventories at year end were reported to be still large but these will be further reduced if the anticipated average demand growth in 1977 and 1978 materializes.

Since Alcan is not directly engaged in smelting in Continental Europe, the ingot supplies for its fabricating plants are obtained mainly from ÅSV in Norway. Sales tonnage of fabricated products was higher by about 35 per cent in 1976. This growth, together with some improvement in prices and rationalization of operations, cost-cutting measures and increased productivity, was reflected in substantially better financial results in all of the countries where the Group operates, except Spain. Area net income after tax improved to a profit of \$24 million as opposed to a loss of \$1.6 million in 1975. The 1976 net income benefitted from some inventory profits.

In Spain, Empresa Nacional del Aluminio, S.A. (Endasa), in which Alcan holds a 25 per cent equity, is strengthening its position as the principal integrated aluminum enterprise in that country. Endasa has a 55 per cent interest in a large smelter and alumina complex now under construction at San Ciprian in Spain. Alcan holds a contract to

Research and Development

In 1976, Alcan's ongoing fundamental and applied research programs were concerned with many phases of the business, from processing of raw materials and improved technology in smelting, to development of special alloys and products, fabricating and joining techniques and methods of surface finishing for aluminum.

The Company employs some 900 scientists, engineers, technicians and support staff in R & D activities in its three research centres in Canada and the U.K. and in development projects associated with its manufacturing facilities throughout the world.

In partnership with L'Aluminium Pechiney, the construction of a pilot plant in Southern France to produce alumina from non-bauxitic materials such as clays and shales was completed in September. Experimental processing of various raw materials is now under way. In addition, Alcan participates with other aluminum producers in the ongoing evaluation by the U.S. Bureau of Mines of a number of other processes for the extraction of alumina from non-bauxitic materials.

The expense incurred for research and development activities amounted to \$24.4 million in 1976.

Continental Europe (*continued*)

provide technology, basic engineering and start-up support for the 880,000-ton-per-annum capacity alumina plant which is scheduled to begin operations in 1979. The alu-

mina will be used by smelters in Spain, including those owned by Endasa, and 55 per cent of the bauxite requirements will be supplied by Alcan. A smelter to reach 198,000 tons of capacity early in 1980 is also to be built at San Ciprian. In

1976 Alcan participated to the extent of \$1.7 million in a capital increase of Endasa in order to maintain its interest in that company at 25 per cent.

Africa

In Nigeria, the fabricating subsidiaries, Alcan Aluminium of Nigeria Limited and Flag Aluminium Products Limited, maintained good levels of profitability during the year as the country's prosperity continued to grow.

In Ghana, the semi-fabricating and end-products operations continued to show good results.

In Guinea, Compagnie des Bauxites de Guinée, in which Alcan

holds a minority participation in partnership with the Government of Guinea and five other aluminum producers, mined over six million tons of bauxite in 1976 and showed a profit for the first time. The Company purchased 1.4 million tons of bauxite, mainly for use in its Québec alumina plants.

In South Africa, Hulets Aluminium Limited, a fabricating company in which Alcan has a 24 per

cent equity participation, recorded lower earnings in 1976. Silicon Smelters (Pty) Limited, in which Alcan owns a one-third interest, overcame production problems experienced early in the year but incurred losses. It is now operating on an improved basis. The output was sold to the Group and to other export markets.

Latin America

Brazil's economy continued to grow in the face of severe import restrictions which, among other effects, impeded growth in aluminum consumption. Aided by a full year's production from the smelter expansion completed in 1975, however, the sales and earnings of Alcan Alumínio do Brasil S.A. again grew significantly to new record levels. Net income was \$39 million, compared with \$32 million in 1975.

During 1976 the new sheet mill at Pindamonhangaba, between São Paulo and Rio de Janeiro, neared completion. When this facility begins operation shortly, it will give Latin America its first mill capable of rolling the full range of today's strong, light-gauge, close-tolerance sheet products.

Construction began on a 30,000-ton expansion of Alcan Alumínio do Brasil's Saramenha smelter and of supporting alumina facilities on the same site. This represents a capital

program of \$90 million, financed from internal sources and from a \$50 million eight-year floating-rate loan placed by 'Alcanbrasil' with a syndicate of international banks.

Construction work on the \$300 million first stage of a bauxite development on the Trombetas River in Brazil's Amazon region was continued by Mineração Rio do Norte S.A. This is a consortium company, sponsored by Companhia Vale do Rio Doce (CVRD) and Alcan, and includes seven other corporate partners from Brazil, Europe and North America. Capacity of the first stage will be 3.35 million metric tons of bauxite per annum, of which 1.2 million metric tons will go to the Company's alumina plants in Canada. Bauxite shipments are expected to start in 1979.

In Mexico, Alcan Alumínio, S.A. saw a very good year disrupted by a sharp devaluation of the peso on 1 September and by subsequent un-

settled conditions. The company's final earnings were good in peso terms but only modest when expressed in dollars.

Alumínio Alcan de Colombia, S.A. showed good profits as Colombia emerged from its 1975 slump and received a substantial boost from high market prices for coffee.

Alcan Alumínio del Uruguay S.A. showed good profits as improvements in Uruguay's exports to Europe and Latin America provided a needed lift to the economy.

Alcan de Venezuela, S.A. continued to show high rates of growth and profitability, in spite of the appearance of several new competitors attracted by the country's booming economy.

Aided by Argentina's improving economic conditions, Alcan's related company Camea S.A. improved its profitability over 1975 levels.

Operations • Middle East, Asia and South Pacific Region

In Australia, Japan and India, where the aluminum industry is well developed, and elsewhere in the vast continent of Asia where live hundreds of millions of potential users of aluminum, Alcan plays a significant role.

In Japan, the second largest market for aluminum after the U.S., Alcan has participated for almost 50 years and has a 50 per cent holding in one of the principal Japanese aluminum groups. In Australia and India, the company took part in establishing the aluminum industry



40 years ago and holds a major position in both countries. Alcan was a pioneer aluminum fabricator in Indonesia, New Zealand, and later

in Malaysia and Thailand, and has traded actively through the Pacific and Asian regions.

An area general manager for Australia and New Zealand is located in Sydney; for India, in Calcutta; and for Southeast Asia, in Hong Kong.

Within this larger regional grouping, Alcan also includes the Middle East where trading activities have been conducted for many years and where new business and investment opportunities are under continuing study.

India

Indian Aluminium Company, Limited, in which Alcan owns 55.27 per cent of the common shares with the balance widely held by the Indian public and by institutions, operates the largest integrated bauxite, alumina, smelting and fabricating enterprise in the sub-continent.

Due to higher sales volume and improved price realizations on semi-fabricated products, this company increased its net profits by 16 per cent in 1976, though, due to exchange adjustments, the earnings in

consolidation were lower. Total aluminum shipments for the year were 104,000 tons, including 22,000 tons of ingot exports permitted by the authorities to alleviate problems of surplus inventories accumulated in 1975. Demand for electrical grade metal increased with higher government spending on power transmission and distribution projects, and sales of fabricated products rose with the general economic recovery.

The company's smelter production reached 93,000 tons, an

increase of eight per cent over the levels of the previous year, due to improved availability of power in the early parts of 1976. However, in the latter part of the year, the State-owned power supplies were again curtailed by the deficiency of monsoon rainfall and smelter operations at year end were reduced to 62 per cent of their rated annual capacity of 129,000 tons. Power restrictions also affected the level of fabricating operations and shipments.

Japan

Alcan's investments in Japan include a 50 per cent holding in one of the country's largest aluminum producers, Nippon Light Metal Company, Ltd (NKK), with the balance of the equity widely held by institutional and public shareholders. This company, with its subsidiaries, is an integrated alumina, smelting and

fabricating operation.

In 1976, the Japanese economy recovered slowly but primary aluminum demand rose by 30 per cent over 1975 to equal the previous record level of 1973. The domestic aluminum smelters, including NKK, however, reduced production to about 60 per cent of capacity so

that, despite continuing heavy ingot imports, excess industry stocks decreased by more than 300,000 tons. The market gradually supported better prices for ingot and fabricated products, and the financial results of the company improved in the course of the year. By the end of 1976, NKK had approximately

Japan (continued)

reached a break even point. The year's sales were about \$850 million, but high energy costs and the low operating rate resulted in a loss for the year, Alcan's share being \$11.8 million against \$17.7 million

in 1975.

Prospects for 1977 in Japan appear to be a continuing moderate increase in demand which should allow NKK to operate profitably.

Alcan's other 50 per cent owned related company, Toyo Aluminium K.K. (Toyal), is continuing its lead-

ing role in the rapid growth of the foil and aluminum paste markets in Japan. A new subsidiary, Toyo Aluminium Foil Products K.K., was established to further the company's moves in the field of consumer products. The company was profitable in 1976.

Australia and New Zealand

In Australia, Alcan owns 70 per cent (and Australian institutional investors the balance) of Alcan Australia Limited which, with its 50,000-ton smelter and several plants for fabricated and consumer products, is a major member of the Australian industry. In spite of the country's lagging economy in 1976, this company increased its consolidated profits to \$3.5 million. Starting early in the year, the operating level of the smelter was raised to full capacity from a reduced rate of 66 per cent. To broaden and strengthen its marketing base, particularly in the building and residential fields, the company began the manufac-

ture of windows and doors and opened a replacement window service for the renovation market. It also introduced a new pleasure boat, combining aluminum with fibre glass, which was well received, and production facilities will be expanded.

The year 1976 closed with Alcan Australia's metal sales in balance with full smelter production, and further expansion of the smelter is being planned. The energy required to support this expansion is already under contract. The recent Australian devaluation should strengthen operations there.

Alumina supply for the smelter,

and for export to Alcan's smelter in Kitimat, British Columbia, derives from Alcan's 21.39 per cent ownership of the world's largest alumina plant at Gladstone, in the state of Queensland.

Alcan New Zealand Limited, the principal fabricator in that country, increased its 1976 sales tonnage by 30 per cent, and profits were \$1 million, notwithstanding the problems of inflation, exchange rate fluctuations and industrial unrest in the general economy. The company's associated window-making enterprises had a profitable year.

Southeast Asia

In the fast-developing and populous nations of Southeast Asia, the Group's interests are in aluminum ingot sales, bauxite production and the development of pioneer fabricating enterprises in several countries.

Some 25,000 tons of ingot were delivered to the People's Republic of China early in the year, to com-

plete a series of spot sales which had been arranged in 1975.

Two fabricating subsidiaries, Alcan Thai Company Limited, in Thailand and P.T. Alcan Indonesia, moved from loss to profit positions in 1976, the former with a net income of \$400,000 earned mainly from export sales to the Middle East.

Aluminium Company of Malay-

sia Berhad, in which Alcan's equity has been reduced to 34.48 per cent, operated at a deficit due to government price controls on fabricated products, but these controls were later relaxed.

Bauxite production by a mining subsidiary in Malaysia was at a level of 600,000 tons in 1976, mainly for sales to Japan and Taiwan.

Financial Review

Sales revenues were \$2,656 million (\$2,302 million in 1975), due to an 8 per cent increase in total tonnage, the significantly higher prices realized, and the increased proportion of semi-fabricated sales, which increased to \$1,701 million from \$1,370 million in 1975. Ingot sales revenues were \$432 million, against \$441 million in 1975, as ingot tonnage fell to 561,800 tons from 616,900 tons last year.

Revenues from other products such as alumina, chemicals and other metals, at \$452 million, increased from the level of \$419 million achieved in the previous year, but gross profitability declined.

The cost of goods sold increased to \$2,155 million from \$1,840 million last year. Apart from reflecting increased tonnage and continued inflation, the year's costs were distorted by the impact of strikes, including charges arising from additional metal purchases.

Selling, Research and Administrative expenses were \$195 million, an increase of 7 per cent over the previous year. Of the increase, \$3 million was in respect of the consolidation of new subsidiaries.

Interest expense fell to \$100 million from \$105 million in 1975, reflecting repayment of debt following the issue of Alcan shares in mid-year.

Tax Rate

Alcan's effective tax rate for 1976 was 39 per cent, the same as in 1975. Alcan's taxes are affected by differing tax rates in the various countries in which it operates, by taxes on intercompany dividends and by the effect of investment or similar allowances. Non-taxable foreign exchange gains or losses which arise on translation also affect the tax rate, as do any other non-taxable items.

Net Income

Net income of \$44 million reflected an improving quarterly earnings trend, in spite of heavy losses on Canadian operations in the second half.

This trend was due to a considerable improvement in the earnings of most of the overseas subsidiaries, and to reduced losses in equity companies. Equity income in 1976 also benefitted from Alcan's new equity investment in Hunter Douglas N.V. The changes in quarterly income reflect the recovery from recession in North America which preceded the recovery in some other countries, as shown by the breakdown of Alcan's net income for 1976 and for 1975 between consolidated income reported by Aluminum Company of Canada, Ltd (Alcan: Canada) and its subsidiaries, and the total income of all other elements in the Group.

Net Income
(in millions of U.S. dollars)

1976	1 Qtr	2 Qtr	3 Qtr	4 Qtr	Year
Alcan: Canada	5.3	4.6	(17.9)	(9.2)	(17.2)
All Others	(0.8)	1.5	28.3	32.2	61.2
Alcan	4.5	6.1	10.4	23.0	44.0

1975	1 Qtr	2 Qtr	3 Qtr	4 Qtr	Year
Alcan: Canada	(0.5)	(0.6)	5.1	(3.5)	0.5
All Others	18.1	4.9	(0.2)	(0.7)	22.1
Extraordinary gain	-	-	-	12.4	12.4
Alcan	17.6	4.3	4.9	8.2	35.0

For Aluminum Company of Canada, the first half of 1976, compared with 1975, was characterized by improving earnings from Canadian smelting and fabricating operations, and by a return to substantial profitability in the United States. In the second half of 1976, strikes caused heavy losses in Canada and, for reasons given earlier, the Jamaican operations were unprofitable.

In other Alcan operations, net income benefitted throughout the year from a continued high level of

earnings in Latin America, surpassing the previous year's level, though marginally lower in the first half than in 1975, and from improved earnings from smelting and fabricating in Australia. Income from Continental Europe was lower in the first quarter, but for the three remaining quarters showed a large improvement after the loss in 1975.

Operations in the United Kingdom recorded significant losses in the first two quarters of 1976, as had been the case for most of 1975 but, after a small loss in the third quarter, improved to substantial profitability in the last quarter.

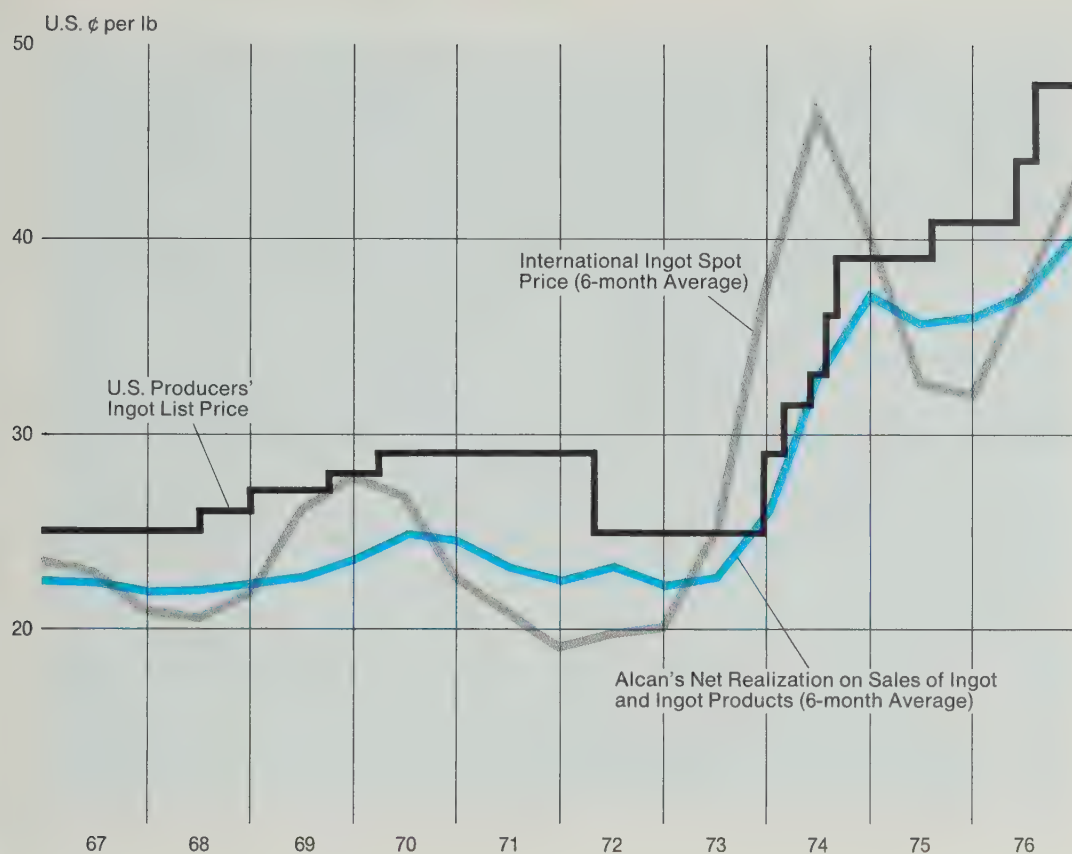
Another major element in the improvement in second half income was a recovery in Nippon Light Metal, in which Alcan's 50 per cent interest resulted in an equity loss of \$11.8 million for the year, compared with \$17.7 million for 1975. Of the 1976 loss, \$9.6 million arose in the first half but, after a further loss in the third quarter, a marginal profit was earned in the final period.

The sale of lower cost inventories accumulated during the recession in 1975 benefitted 1976 net income. Inventory profits for 1976 are estimated at \$40 million before tax.

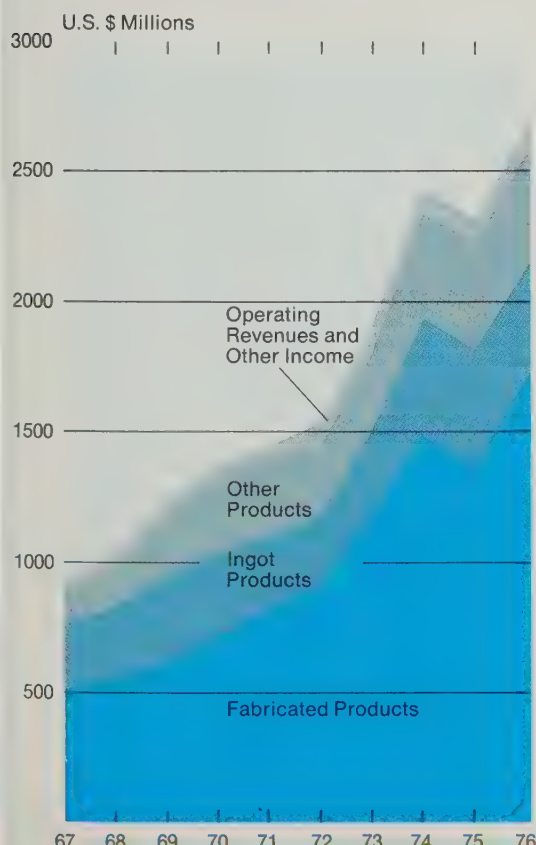
Foreign Exchange

If debt (not maturing within one year) in currencies other than U.S. dollars had been valued at year-end rates of exchange, reported net income would have increased by \$7.1 million in 1976 and by \$40.1 million in 1975. The principal unrealized gains in 1976 were caused by declines in the value of the U.K. pound and of the Australian dollar, partially offset by appreciation of the German mark.

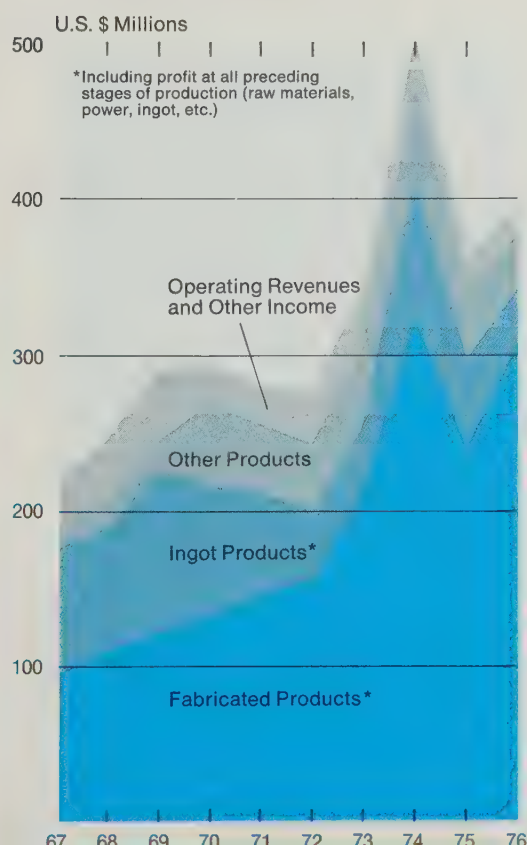
Trends in Aluminum Prices



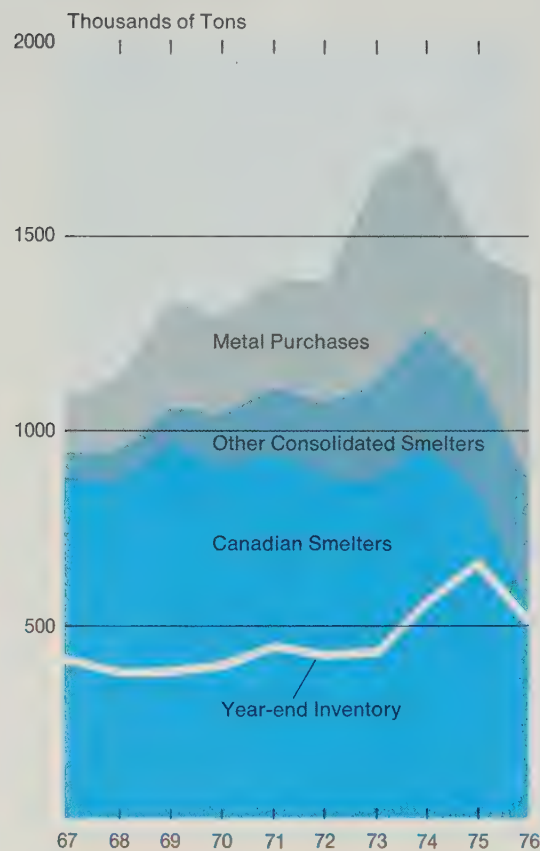
Sources of Consolidated Revenues



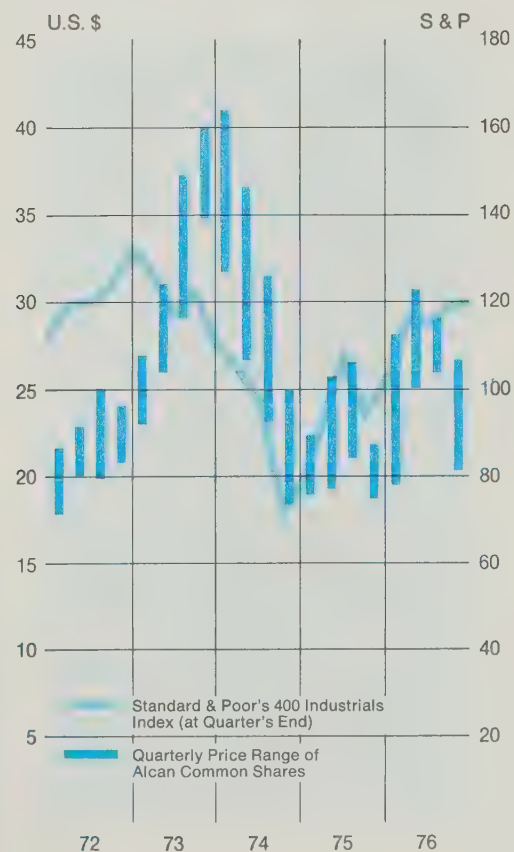
Sources of Consolidated Gross Profit



Alcan Consolidated Metal Sources



Alcan Aluminium Limited Price Range of Common Shares New York Stock Exchange



Financial Review

Financing

In April, Aluminum Company of Canada, Ltd made its first debt issue in the Eurodollar market, raising US\$50 million at 9½ per cent with a maturity of 12 years. In July, in view of the improved prospects for the aluminum industry and of the group's future requirements, Alcan sold five million new common shares, raising \$127.5 million after issue expenses. The new shares were marketed by leading underwriters in the United States, Canada and Europe. Of the proceeds, \$67 million was applied to increase the share capital of Aluminum Company of Canada, Ltd and the balance was retained by the parent company for future requirements, including additions to existing investments in Norway and in Australia. The issue permitted an equivalent reduction in group long-term indebted-

ness and the sale of metal in inventory allowed the repayment and termination of credits arranged in 1975 to finance the excess inventories which were accumulating at that time.

Flow of Funds

Although aluminum inventories were lower at December 1976 than a year earlier, working capital was little changed on the year due to substantially higher receivables, reflecting improved business, and to increased inventories of raw materials, including higher stocks of bauxite. Capital expenditures, at \$138 million, were below the planned level, in part due to labour problems at the Québec smelters which caused deferment of expenditures.

For 1977, expenditures of approximately \$300 million are planned.

This amount includes allowances for continued expenditure on the Trombetas bauxite project and smelter expansion in Brazil, for expansion in Australia and a start on smelter modernization in Québec.

Common Dividends

Dividends amounted to \$15 million or 40¢ per common share, compared to 90¢ per share in 1975 and \$1.20 in 1974. The rate of 10¢ per share initiated in the first quarter was maintained during the year, as improved conditions were offset by strike losses in the second half. On 2 February, the Directors declared a quarterly dividend of 20 cents per share, payable on 7 March 1977, which is well below the limits imposed by the Canadian Anti-Inflation Board guidelines.

Information by Geographic Areas

Year ending 31 December 1976	Canada	U.S. and Caribb.	Europe	Latin America	South Pacific	Asia and Africa	Elimin- ations	Total Consolidated
in millions of U.S. dollars								
Sales and operating revenues								
To subsidiary companies	\$ 508	\$ 66	\$ 12	\$ —	\$ 40	\$ 1	\$ (627)	\$ —
To other companies	533	753	802	264	128	176	—	2,656
Total	1,041	819	814	264	168	177	(627)	2,656
Net income — 1976	(25)	2	26	41	6	(2)	(4)	44
Net income — 1975, excluding extraordinary gain	14	(11)	(16)	37	8	(7)	(2)	23
31 December 1976								
Working capital	\$ 300	\$174	\$168	\$ 57	\$ 52	\$ 39	\$ (16)	\$ 774
Fixed capital (net)	665	207	279	122	51	77	—	1,401
Investments and other assets	8	16	107	38	1	74	—	244
Capital employed	973	397	554	217	104	190	(16)	2,419
Number of employees (thousands)	18	7	16	8	2	9	—	60

Sales to subsidiary companies are made at a fair market price recognizing volume, continuity of supply and other factors. Net income is total revenues less expenses directly related to the geographic area in accordance with generally accepted accounting principles. Capital employed represents the Company's book value of the net assets located in each area.

Of the Canadian sales, \$622 million were export sales, principally to the United States.

Consolidated Statement of Income

**Alcan Aluminium
Limited**

year ending 31 December 1976

in thousands of U.S. dollars

	1976	1975
Revenues		
Sales	\$ 2,585,426	\$ 2,229,817
Operating revenues	70,646	71,636
Other income (note 9)	14,684	11,085
	2,670,756	2,312,538
Costs and expenses		
Cost of sales and operating expenses	2,154,669	1,839,580
Depreciation and depletion	115,621	110,740
Selling, research and administrative expenses	195,494	182,277
Interest on debt not maturing within one year	81,064	85,060
Other interest	19,131	19,954
Other expenses	8,379	5,612
	2,574,358	2,243,223
Income before income taxes and other items	96,398	69,315
Income taxes (note 10)		
Current	60,079	26,601
Deferred	(22,719)	456
	37,360	27,057
Income before other items	59,038	42,258
Equity income and minority interests (note 11)	(15,031)	(19,688)
Income before extraordinary gain	44,007	22,570
Gain on sale of investment	—	12,430
Net income (note 1)	\$ 44,007	\$ 35,000

in U.S. dollars

Income per common share (after preferred dividends)		
Before extraordinary gain	\$ 1.14	\$ 0.65
Extraordinary gain	—	0.36
	\$ 1.14	\$ 1.01
Dividends per common share	\$ 0.40	\$ 0.90

Consolidated Balance Sheet

**Alcan Aluminium
Limited**

31 December 1976

in thousands of U.S. dollars

Assets

	1976	1975
Current assets		
Cash and time deposits	\$ 57,900	\$ 59,225
Receivables	494,061	418,859
Aluminum	445,549	475,118
Raw materials and other supplies	371,148	357,490
	1,368,658	1,310,692
Deferred charges	34,031	29,279
Deferred receivables (note 5)	80,114	71,789
Investments in companies owned 50% or less (note 2)	206,880	214,797
Property, plant and equipment (note 3)	2,996,689	2,885,982
Less: Accumulated depreciation and depletion	1,596,133	1,500,758
	1,400,556	1,385,224
Total assets	\$ 3,090,239	\$ 3,011,781

Liabilities and Shareholders' Equity

Current liabilities		
Payables	\$ 357,306	\$ 304,624
Short-term borrowings (principally from banks)	123,491	151,973
Income and other taxes	74,496	47,328
Debt maturing within one year (note 4)	39,667	40,990
	594,960	544,915
Debt not maturing within one year (note 4)	837,187	971,135
Deferred credits	76,579	54,196
Deferred income taxes	148,746	166,416
Minority interests (note 6)	163,163	163,154
Shareholders' equity		
Preferred shares, par Can. \$40 (note 7)		
Outstanding — 56,309 shares (1975 — 62,402)	2,088	2,314
Common shares, without nominal or par value (note 7)		
Outstanding — 40,446,694 shares (1975 — 35,378,987)	426,905	291,480
Retained earnings (note 8)	840,611	818,171
	1,269,604	1,111,965
Total liabilities and shareholders' equity	\$ 3,090,239	\$ 3,011,781
Approved by the Board:	Nathanael V. Davis, Director	John H. Hale, Director

Consolidated Statement of Changes in Financial Position

**Alcan Aluminium
Limited**

year ending 31 December 1976

in thousands of U.S. dollars

	1976	1975
Source of funds		
Income after taxes	\$ 59,038	\$ 42,258
Depreciation and depletion	115,621	110,740
Deferred income taxes	(22,719)	456
Other	(1,990)	2,053
From operations	149,950	155,507
Common shares (net of financing expenses)	129,132	15,761
Preferred shares of a subsidiary company	—	49,235
New debt	110,109	156,453
Disposals of plant and equipment	5,458	12,239
Sale of investments (including extraordinary gain in 1975)	744	18,654
Other (net)	11,322	21,866
	406,715	429,715
Application of funds		
Plant and equipment	126,457	180,842
Investments	11,578	27,010
Debt repayments	245,485	66,212
Dividends	15,274	31,348
	398,794	305,412
Increase in working capital (note 16)	7,921	124,303
Working capital — beginning of year	765,777	641,474
Working capital — end of year	\$ 773,698	\$ 765,777

Consolidated Statement of Retained Earnings

**Alcan Aluminium
Limited**

Retained earnings — beginning of year	\$ 818,171	\$ 814,519
Net income	44,007	35,000
	862,178	849,519
Underwriting commissions and expenses of issue of 5,000,000 common shares	6,293	—
Dividends on preferred shares	102	107
Dividends on common shares	15,172	31,241
	21,567	31,348
Retained earnings — end of year (note 8)	\$ 840,611	\$ 818,171

Notes to Financial Statements

in millions of U.S. dollars

1. Summary of accounting policies

Principles of consolidation

The consolidated financial statements include the accounts of all companies more than 50% owned. In addition, under the equity accounting principle, consolidated net income includes Alcan's equity in the net income or losses of all companies 20-50% owned and the investments in these companies have been increased by Alcan's share of their undistributed net income since acquisition. When the cost of an investment differs from the book value of Alcan's equity therein at date of acquisition, the difference is amortized over the estimated useful life of the related fixed assets. Intercompany items and transactions between consolidated companies, including profits in inventories, are eliminated.

Translation of accounts into United States dollars

The consolidated financial statements are expressed in U.S. dollars since this is the principal currency of international trade in which Alcan's business is mainly involved.

Accounts included in the consolidated statement of income, except depreciation and depletion, are translated at average rates of exchange prevailing during the year.

Accounts included in the consolidated balance sheet are translated at rates of exchange at year end except that (a) inventories, investments, fixed assets and accumulated depreciation and depletion are at rates at dates of acquisition, (b) deferred income taxes are at rates at dates of origin, and (c) debts not maturing within one year and capital stock are at rates at dates of issue. Translation adjustments are included in income.

The Financial Accounting Standards Board in the United States requires that companies reporting to investors in the United States adopt the practice of translating long-term debt at current rates of exchange. However, as Alcan's borrowings in currencies other than U.S. dollars have been invested for the most part in the country of the borrowing and will be repaid out of funds generated in the same currency, Alcan believes that it could be misleading and cause violent fluctuations in reported earnings to recognize immediately translation gains or losses which arise from changes in exchange rates. Accordingly, Alcan has not adopted the current rate method but has continued to follow its policy of translating such debt at historic rates, an accounting practice which is generally accepted in Canada. The following table compares reported net income with the net income that would have been reported using the FASB current rate method, and also shows the cumulative effect on retained earnings.

	1976		1975	
	As Reported	Current Rate Method	As Reported	Current Rate Method
Consolidated net income				
First quarter (unaudited)	\$ 4.5	\$ 5.2	\$ 17.6	\$ 16.8
Second quarter (unaudited)	6.1	13.1	4.3	17.7
Third quarter (unaudited)	10.4	2.9	4.9	34.9
Fourth quarter (unaudited)	23.0	29.9	8.2	5.7
	\$ 44.0	\$ 51.1	\$ 35.0	\$ 75.1
Dollars per common share	1.14	1.33	1.01	2.16
Consolidated retained earnings				
Beginning of year	\$ 818.2	\$ 797.4	\$ 814.5	\$ 753.6
End of year	840.6	826.9	818.2	797.4

Deferred income taxes

Income tax regulations in Canada and certain other countries permit the deduction from taxable income of certain items (principally depreciation) in amounts which do not coincide with those charged for financial reporting purposes. The effect of such timing differences on income taxes otherwise payable is recognized as deferred income taxes.

Inventories

Aluminum, raw materials and other supplies are stated at cost or net realizable value, whichever is the lower. The cost of inventories other than those in the United States is determined for the most part on the monthly average method. The cost of inventories in the United States, amounting to \$116 million, is determined by the last-in-first-out method, which is permitted for income tax purposes. Had such inventories been valued on the monthly average method, the value would have been \$57 million higher.

Other

Property, plant and equipment includes the cost of renewals and betterments. Repairs and maintenance are charged against income as incurred.

Depreciation is calculated on the straight-line method using rates based on the estimated useful lives of the respective assets. Depletion, not significant in amount, is calculated on the unit of production basis.

Income per common share is calculated by dividing net income less preferred dividends by the average number of shares outstanding during the relevant period. For 1976, quarterly averages were used because of the shares issued during the year (1st Quarter, 35,390,272; 2nd, 35,446,694; 3rd, 39,196,694; 4th, 40,446,694). For 1975, the average for the year was 34,712,069.

2. Investments in companies owned 50% or less	1976	1975
At cost plus equity in undistributed net income since acquisition		
Companies 50% owned (cost \$53 million)	\$ 61	\$ 73
Companies 20% to 50% owned (cost \$118 million)	142	137
At cost		
Companies less than 20% owned	4	5
	<u>\$ 207</u>	<u>\$ 215</u>

The results of operations and the financial position of the 20-50% owned companies, located mainly in Australia, Germany, Guinea, Japan and Norway, are summarized below.

Results of operations for the year	1976	1975
Revenues	\$2,943	\$2,001
Costs and expenses	<u>2,935</u>	<u>2,043</u>
Income (loss) before income taxes	8	(42)
Income taxes	<u>3</u>	<u>(30)</u>
Net income (loss)	\$ 5	\$ (12)
* Alcan's share of net income (loss)	(4)	(12)
Dividends received by Alcan	3	4
Financial position at 31 December		
Working capital	\$ 658	\$ 639
Property, plant and equipment (net)	1,514	1,470
Other assets (net)	<u>314</u>	<u>246</u>
	2,486	2,355
Less: Deferred taxes	62	93
Debt not maturing within one year	<u>1,680</u>	<u>1,504</u>
Net assets	\$ 744	\$ 758
** Alcan's equity in net assets	198	205

* Where a company operates as a joint venture supplying materials to each participant, Alcan's share of the net income is applied to the cost of the materials so obtained.

** If debt not maturing within one year of companies 20-50% owned was translated into U.S. dollars at year-end rates of exchange, Alcan's equity in net assets of such companies would be reduced by \$34 million.

Notes to Financial Statements

in millions of U.S. dollars

3. Property, plant and equipment

	1976			1975
	Cost	Acc. Dep.	Net	Net
Land, and water rights	\$ 65	\$ 1,	\$ 64	\$ 64
Mineral properties, rights and development	18	7	11	11
Raw material, power and other facilities	1,041	623	418	413
Smelting facilities	974	532	442	443
Fabricating facilities	899	433	466	454
	<u>\$2,997</u>	<u>\$1,596</u>	<u>\$1,401</u>	<u>\$1,385</u>

Expenditures in 1977 are expected to be approximately \$300 million.

4. Debt not maturing within one year

	1976	1975
Aluminum Company of Canada, Ltd		
*Bank loans under \$200 million revolving credit agreement, due 1980/1984	\$ 50	\$ 120
9½ % Sinking fund debentures, due 1995	100	100
10¾ % Sinking fund debentures, due 1994 (Can. \$75 million)	77	77
9¾ % Sinking fund debentures, due 1991 (Can. \$57 million)	56	59
4½ % Sinking fund debentures, due 1980	12	25
7½ % Serial debentures, due 1977/1979 (Can. \$30 million)	30	40
9½ % Debentures, due 1988	50	—
5.10% Notes, due 1977/1992	72	77
Other debt, due 1977/2001	10	8
Alcan Aluminum Corporation (U.S.A.)		
9½ % Notes, due 1980/1994	45	45
4¾ % Notes, due 1977/1984	27	31
Other debt, due 1977/1990	5	4
Alcan Aluminium (U.K.) Limited (consolidated)		
*Loan, due 1979 (£15 million)	36	36
9% Loan stock, due 1981/1994 (£9 million)	22	24
10½ % Loan stock, due 1981/1994 (£8 million)	19	19
*Bank loans, due 1977/1983 (£14 million)	33	29
Other debt, due 1977/1994 (£8 million)	19	20
Alcan Europe N.V. (consolidated)		
5½ % Bonds, due 1987 (Sw. F. 100 million)	26	26
*Bank loans, due 1977/1992	36	31
Other debt, due 1977/1994	3	6
Alcan Trading Limited		
Bank loans	—	63
Alcan Jamaica Limited		
*Bank loans, due 1978/1980	44	44
Indian Aluminium Company, Limited		
Debentures and bank loans, due 1977/1984 (principally rupees)	20	22
Other companies		
*Bank loans, due 1977/1986	38	57
Debentures and notes, due 1977/1988	50	50
	<u>880</u>	<u>1,013</u>
Less: Debt maturing within one year included in current liabilities (equivalent to \$40 million and \$41 respectively, at year-end rates of exchange)	<u>43</u>	<u>42</u>
	\$ 837	\$ 971

*Interest fluctuates with lender's prime commercial rate.

After allowing for prepayments, sinking fund and other requirements over the next five years amount to \$43 million in 1977, \$75 in 1978, \$100 in 1979, \$77 in 1980 and \$50 in 1981.

If translated into United States dollars at year-end rates of exchange, debt not maturing within one year at 31 December 1976 would decrease by \$20 million and, if there were no further changes in exchange rates, this amount would be credited to income as the debt matures.

5. Deferred receivables

Deferred receivables include \$44 million due from the Government of Guyana over the period 1978 to 1991 in respect of the nationalization in 1971 of Alcan's bauxite and alumina assets in that country. This amount bears interest at 6% per annum.

6. Minority interests in subsidiary companies	1976	1975
Preferred shares	\$ 84	\$ 88
Common shares	46	45
Retained earnings	33	30
	<u>\$ 163</u>	<u>\$ 163</u>

7. Alcan preferred and common shares

The number of 4¼ % cumulative redeemable convertible preferred shares originally authorized and issued was 1,500,000 of which 1,404,289 were exchanged for an equal number of common shares prior to the expiration of the conversion privilege in 1973 and 39,402 were subsequently purchased on the open market (1976: 6,093, 1975: 6,691). The outstanding preferred shares are subject to redemption in whole or in part at any time at the option of the Board of directors on thirty days' notice at Can. \$43 per share.

The number of common shares authorized is 60,000,000. In March 1976, 67,707 shares were issued for a 50% equity in Intercontinental Alloys Corporation in the U.S.A., and valued at \$1.6 million, being the average market price of Alcan's shares during the month prior to the purchase. In July 1976, the Company issued 5,000,000 common shares for a cash consideration of \$133.8 million before underwriting commissions and issue expenses of \$6.3 million.

At 31 December 1976, 99,500 common shares remained under option to employees, including 24,000 to officers and directors of the Company. These options were granted in 1967 at Can. \$33.0625 per share and expire in March 1977.

8. Retained earnings

Consolidated retained earnings at 31 December 1976 include Can. \$100 million which, pursuant to the provisions of certain debt issues of Aluminum Company of Canada, Ltd, is not distributable as dividends either in cash or in kind to Alcan, the holder of its common shares.

Consolidated retained earnings at 31 December 1976 also include about \$328 million, some part of which may be subject to certain taxes on distribution to the parent company. No provision has been made for such taxes because these earnings are reinvested in the business.

9. Other income	1976	1975
Interest	\$ 9.8	\$ 9.5
Gain on redemption of debt	3.0	—
Other	1.9	1.6
	<u>\$ 14.7</u>	<u>\$ 11.1</u>

10. Income taxes

Income taxes provided in 1976 represent approximately 39% of consolidated pre-tax income, an effective rate lower than statutory rates in Canada. The reduction is attributable to different tax rates in other countries, to investment and other special allowances, and to non-taxable income and losses.

Notes to Financial Statements

in millions of U.S. dollars

11. Equity income and minority interests

	1976	1975
Alcan's equity in net income (losses) of companies 20-50% owned	\$ (5.0)	\$ (13.1)
Minority shareholders' interest in net income of subsidiary companies	(10.0)	(6.6)
	\$ (15.0)	\$ (19.7)

12. Commitments

Alcan has entered into long-term cost-sharing joint ventures under which the Company is required to pay its share of operating costs of facilities and costs of servicing long-term debt. The fixed portion of the commitments under these and other arrangements amounts to \$20 million in 1977, \$20 in 1978, \$19 in 1979, \$24 in 1980, \$21 in 1981 and lesser annual amounts up to 1992.

Minimum rental commitments, including charter hire of ships, amount to \$33 million in 1977, \$20 in 1978, \$12 in 1979, \$11 in 1980, \$8 in 1981 and lesser annual amounts thereafter. Total rental expense amounted to \$59 million in 1976 (\$59 in 1975).

See also reference to capital expenditures in note 3 and debt repayments in note 4.

13. Pension plans

The Company and its subsidiaries (with some exceptions) have established pension plans in the principal countries where they operate, for the greater part contributory and generally open to all employees. The total pension expense in 1976 was \$34 million (\$31 in 1975) which includes, as to certain of the plans, amortization of unfunded actuarial liabilities which the Company and its subsidiaries are funding. The unfunded actuarial liability for currently vested benefits amounted to \$13 million. Based on the most recent actuarial reports, the total unfunded actuarial liability for all plans amounted to \$95 million, which for the most part is being funded over a period of 15 years.

During 1976 an increase in unfunded actuarial liability of \$26 million arose from amendments made to a Canadian pension plan covering unionized employees.

14. Remuneration of directors and officers

The Company has 15 directors and their remuneration as such, which was paid by the Company, amounted to \$69,002 in 1976 (\$59,556 in 1975). The Company has 13 officers, seven of whom are directors of the Company. The aggregate remuneration received by these officers and by past officers amounted to \$1,609,073 in 1976 (\$1,530,324 in 1975) of which \$262,569 was paid by the Company, \$94,876 by Alcan International (1975) Limited, a management subsidiary, and \$1,251,628 by Aluminum Company of Canada, Ltd, the Company's principal operating subsidiary.

15. Quarterly financial data (unaudited)

	1976			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Revenues	\$ 604.8	\$ 704.9	\$ 650.8	\$ 710.3
Costs and expenses	578.6	669.7	637.9	688.2
Income taxes	13.0	23.1	(2.2)	3.5
Equity income and minority interests	(8.7)	(6.0)	(4.7)	4.4
Net income	\$ 4.5	\$ 6.1	\$ 10.4	\$ 23.0
	in U.S. dollars			
Income per common share (after preferred dividends)	\$ 0.13	\$ 0.17	\$ 0.27	\$ 0.57

16. Changes in working capital

	1976	1975
Current assets		
Cash and time deposits	\$ (1.3)	\$ (58.1)
Receivables	75.2	(31.5)
Aluminum, raw materials and other supplies	(16.0)	57.0
	<u>57.9</u>	<u>(32.6)</u>
Current liabilities		
Payables and short-term borrowings	24.2	(114.6)
Income and other taxes	27.1	(31.3)
Debt maturing within one year	(1.3)	(11.0)
	<u>50.0</u>	<u>(156.9)</u>
Net increase	\$ 7.9	\$ 124.3

17. Information by geographic areas

Financial information by geographic areas is contained in the summary on page 18.

18. Replacement cost data

The unaudited information required to be disclosed by Accounting Series Release No. 190 issued by the United States Securities and Exchange Commission in March 1976 is contained in the section 'Inflation Accounting' commencing on page 28.

Auditors' Report

To the Shareholders of
Alcan Aluminium Limited

We have examined the consolidated balance sheets of Alcan Aluminium Limited as at 31 December 1976 and 1975 and the related consolidated statements of income, retained earnings, and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and accordingly included such tests of accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion these financial statements present fairly the consolidated financial position of the Company and its subsidiaries as at 31 December 1976 and 1975 and the results of their operations and the changes in their financial position for the years then ended, in accordance with generally accepted accounting principles in Canada, applied on a consistent basis.

Montréal, Canada
2 February 1977

PRICE WATERHOUSE & Co.
Chartered Accountants

Inflation Accounting

International developments

Inflation, although diminishing, continues to trouble most parts of the world, but no wholly satisfactory method of accounting and reporting the effects of inflation on the financial results of a business has yet been developed. However, in 1975, recognizing the need to provide its shareholders and investors with some appreciation of the impact of past inflation on its business, Alcan published a supplementary set of financial statements for 1974, using the current purchasing power method (CPP) of inflation accounting. This was being advocated at that time in several countries, and gave historical costs re-stated in current dollars by use of a consumer price index. Subsequently, it became apparent that in a number of countries this method was not considered adequate to meet the problem, and Alcan decided not to publish any supplementary statements last year. However, during 1976 the search for an appropriate method of accounting under inflationary conditions continued, and there have been significant developments in the United Kingdom, Australia and the United States.

In the United Kingdom, the Government-appointed Sandilands Committee proposed in September 1975 an inflation-accounting method described as 'current cost accounting' (CCA), and this was further refined by the Morpeth Committee in December 1976. The recommended effective date for the larger U.K. companies to adopt CCA is for periods commencing on or after 1 July 1978.

In Australia, a provisional standard issued in October 1976 by the accounting profession suggested that companies adopt 'current cost accounting' (CCA), a procedure carrying the same name but differing somewhat from the method pro-

posed in the U.K., for periods starting on or after 1 July 1977. These statements would supplement the conventional historical cost statements. By July 1978 a formal standard is expected which would make CCA mandatory for financial reporting purposes.

In the United States, the Securities and Exchange Commission (SEC) announced in March 1976, in its Accounting Series Release No. 190, a requirement for the larger listed companies to provide the estimated 'current replacement cost' of productive capacity and inventories with depreciation expense and cost of sales based on those amounts, effective for the year 1976. Unlike the U.K. and Australian versions of CCA, which will call for audited financial statements, the SEC calls for supplementary information which need not be audited.

Replacement cost data

In accordance with SEC requirements, Alcan's estimated replacement cost data are shown on the opposite page, but within the framework of a consolidated balance sheet and income statement. The latter has only been taken to the 'Income before income tax' stage since no appropriate method of accounting for tax under these circumstances has been agreed.

Asset values and operating costs

Alcan's major operating subsidiaries made detailed reviews of their assets, and calculated the replacement cost mainly by valuing specific assets or operating capacities. Valuations of the other assets and those of the remaining smaller subsidiaries were based on appropriate indices.

Generally, replacement costs for the major alumina, power and aluminum smelter facilities have been developed through engineering

estimates of cost per unit of capacity, including appropriate technological improvements, and multiplied by existing capacity to arrive at the estimated total replacement cost.

No attempt has been made to re-engineer the entire productive capacity. Nor do the estimates take into account the manifold problems of relocation and consolidation of existing productive facilities, including availability of labour, sources of raw materials and proximity to customers, all of which would necessarily have to be considered in depth before undertaking actual replacement. These studies might significantly alter the cost and manner of replacement.

Furthermore, replacement would also alter the current level of operating costs, due to the greater efficiency in the use of labour and materials in new production facilities of more modern design. However, these cost changes cannot be quantified with any precision. Nevertheless, Alcan believes that they would significantly offset the additional depreciation on a replacement-cost basis.

Accumulated depreciation is estimated by the relationship of expired lives to total lives of the existing facilities, applied to the estimated replacement cost of the productive capacity. At this point no attempt has been made to re-estimate the useful lives of the assets for the replacement-cost depreciation calculations.

The annual depreciation charge based on replacement values is calculated on the straight-line method, using the historical-cost depreciation rates for existing facilities, applied to the average of the estimated replacement cost of productive capacity as at the beginning and at the end of the year.

Inflation Accounting (*continued*)

Replacement cost of sales is estimated by adjusting historical costs for the inflation occurring during the period between production

and sale.

Amounts on the replacement basis related to locations outside the United States have been compiled initially in local currencies and then translated into U.S. dollars at

year-end exchange rates for productive capacity and inventories, and at average rates during the year for cost of sales and depreciation expense.

Consolidated Balance Sheet

31 December 1976

	Estimated Replacement Cost Basis	Historical Cost Basis
	in millions of U.S. dollars	
Current assets		
Inventories	\$ 923	\$ 817
Other	552	552
Property, plant and equipment (a)	7,133	2,997
Less: Accumulated depreciation and depletion	(4,233)	(1,596)
Other assets (b)	320	320
	<u>\$4,695</u>	<u>\$3,090</u>
Current liabilities	\$ 595	\$ 595
Debt not maturing within one year	837	837
Deferred income taxes and credits	225	225
Minority interests	207	163
Shareholders' equity		
Share capital	429	429
Retained earnings	841	841
Replacement reserve	1,561	
	<u>\$4,695</u>	<u>\$3,090</u>

(a) Land, water rights and mineral properties have not been revalued and are included in the estimated replacement cost at their historical cost of \$83 million. Accumulated amortization and depletion relating to these assets of \$8 million also have not been revalued and are included in the replacement data without change.

(b) Includes investments, in companies owned 50% or less, of \$207 million which have not been revalued and are included in the estimated replacement cost at the same amount.

Consolidated Statement of Income

Year ending 31 December 1976

	Estimated Replacement Cost Basis	Historical Cost Basis
	in millions of U.S. dollars	
Revenues	\$2,671	\$2,671
Costs and expenses		
Cost of sales and operating expenses	2,198	2,155
Depreciation and depletion	278	116
Other	304	304
Income before income taxes	<u>\$ (109)</u>	<u>\$ 96</u>

Inflation Accounting

Conclusions

Some conclusions may be drawn. In particular:

1. The figures indicate that replacement of existing production capacity would not be justified by the 1976 price structure, even after allowing for the problems stated above (such as the greater efficiency that replaced assets would provide) and the fact that 1976 was a poor year for earnings because of work stoppages. This illustrates a fact that has been frequently stated. Of course, replacement might be justified by the price structure which would be in effect when any particular replacement could be completed.

2. Government treatment of capital-intensive business is not satisfactory where current-cost depreciation — although a measure of the current usage of assets — is not allowed as a cost for income tax purposes, and where in Canada and some other countries (although not the U.S. or the U.K.) inventory profits are taxed currently. Furthermore, in most countries exercising price controls, the basis of costing is average costing and not current costing, even though the price controls may thus be giving a negative real return.

3. The current replacement value of Alcan's assets is far higher than the historical cost in current dollars, showing that the inflation in machinery and construction costs has far exceeded the consumer price index. In a capital-intensive industry this leads to a very high current-cost depreciation charge, and a corresponding impact on current-cost earnings. However, cash flow is not affected.

4. Under the recommended guidelines, credit is not taken in the replacement-cost net income statement for gains experienced from having debt, or losses resulting from holding monetary assets, such as cash and receivables, in times of inflation. However, this omission seems questionable in a capital-intensive industry where leverage is of great importance to the capital structure. As Alcan has debt and other net monetary liabilities of about one billion dollars, an average inflation rate of 10 per cent in the countries where it operates would give an annual gain of about \$100 million, greatly improving the current cost picture.

5. The replacement-cost method does not correct for the change in value of currency during the year.

Also, it does not call for the restatement of previous years' accounts in current dollars. It, therefore, will not permit a direct comparison of the replacement value accounts of one year with those of prior years.

Summary of Alcan's view

Because of the lack of established standards, the considerable degree of continuing experimentation and the many subjective judgments required in the compilation of the data, we consider that the figures provided cannot give more than a general impression of the values involved, and that specific comparisons with other reported data are unlikely to be valid.

Furthermore it is our view that an attempt to present a valuation of assets which might replace the existing assets is not sufficiently factual for a satisfactory accounting presentation. We would prefer to see a method which revalues in current dollars the assets which the company actually owns.

The whole problem of inflation accounting is still far from resolved. However, it is likely that considerable progress will be made in 1977 and, when a method is finally agreed, it will mark the most significant development in accounting practice in this century.

A Ten-Year Summary

(Adjusted to give effect to changes in accounting practices)

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Operating Data (in thousands of tons)										
Aluminum shipments by consolidated subsidiaries										
Ingot and ingot products	563	614	742	655	626	592	663	644	617	562
Fabricated products	541	606	621	691	772	859	1,013	1,018	785	953
	1,104	1,220	1,363	1,346	1,398	1,451	1,676	1,662	1,402	1,515
Fabricated products shipments by all subsidiary and related companies										
	701	800	862	937	1,033	1,177	1,376	1,417	1,128	1,365
Production of primary aluminum										
Canada	878	873	969	903	945	880	872	963	838	543
Subsidiary and related companies outside Canada	521	585	720	849	935	981	1,146	1,211	1,178	1,130
Consolidated Income Statement Items (in millions of U.S. dollars)										
Revenues										
Sales of aluminum ingot and ingot products	249	271	342	321	284	267	318	448	441	432
Sales of aluminum fabricated products	514	560	611	723	821	922	1,191	1,489	1,370	1,701
Sales of all other products	104	127	224	268	277	266	306	400	419	452
Operating revenues	52	49	48	52	49	56	57	75	72	71
Other income	8	15	14	10	10	18	19	15	11	15
	927	1,022	1,239	1,374	1,441	1,529	1,891	2,427	2,313	2,671
Costs and expenses										
Cost of sales and operating expenses	635	685	864	988	1,062	1,161	1,452	1,824	1,840	2,155
Depreciation and depletion	74	91	83	94	98	94	101	103	111	116
Interest charges	36	39	50	60	64	69	79	100	105	100
All other expenses (except income taxes)	82	79	99	113	123	126	148	175	187	204
Income taxes	44	59	65	54	38	20	35	85	27	37
Equity in net income of companies 20-50% owned	7	7	11	11	9	8	18	11	(13)	(5)
Minority interests	4	3	4	4	5	6	11	9	7	10
Extraordinary gains	—	—	—	9	—	—	—	27	12	—
Net income	59	73	85	81	60	61	83	169	35	44
Consolidated Balance Sheet Items (in millions of U.S. dollars)										
Working capital	399	323	384	444	401	468	442	641	766	774
Property, plant and equipment (net)	1,074	1,085	1,130	1,223	1,224	1,234	1,217	1,329	1,385	1,401
Investments in companies owned 50% or less	118	157	177	170	174	178	199	212	215	207
Long-term debt	676	608	668	751	740	798	744	881	971	837
Deferred income taxes	150	148	144	150	142	130	123	161	166	149
Minority interests	81	84	92	112	114	114	106	116	163	163
Shareholders' equity	710	747	808	847	872	904	957	1,093	1,112	1,270
Total assets	1,823	1,867	2,047	2,215	2,297	2,370	2,449	2,979	3,012	3,090
Per Common Share (in U.S. dollars)										
Income (after preferred dividends but before extraordinary gains)	1.74	2.17	2.52	2.11	1.75	1.78	2.42	4.11	0.65	1.14
Extraordinary gains	—	—	—	0.27	—	—	—	0.79	0.36	—
Income (after preferred dividends)	1.74	2.17	2.52	2.38	1.75	1.78	2.42	4.90	1.01	1.14
Dividends paid	1.00	1.02	1.12	1.20	1.00	0.80	0.90	1.20	0.90	0.40
Book value	20.27	21.42	22.85	24.03	24.78	25.76	27.71	31.41	31.36	31.34
Other Statistics										
Capital expenditures (net of government development grants — in millions of U.S. dollars)	180	139	147	152	155	115	117	268	208	138
Funds generated from operations (millions of U.S. dollars)	131	148	160	164	155	140	163	275	156	150
Return on average equity (as a percentage)	8.7	10.0	11.0	9.8	7.0	6.9	8.9	16.5	3.2	3.7
Number of common shareholders at year end (thousands)	67	73	72	76	70	64	50	48	47	43
Number of employees at year end (thousands)	63	61	62	67	61	62	62	64	61	60

Principal Subsidiary and Related Companies

Fully owned unless otherwise indicated between parentheses

Operating Companies

North America

Canada

Aluminum Company of Canada, Ltd
Alcan Canada Products Limited
Alcan Smelters and Chemicals Ltd
Alcan-Price Extrusions Limited (50)
AlSCO (1974) Inc.
Revalet Inc. (75)
Roberval and
Saguenay Railway Company, The
Saguenay Shipping Limited
Storall Limited
Supreme Aluminum Industries Limited (27.02)
Vic Metal Corporation (20)

United States

Alcan Aluminum Corporation
V. E. Anderson Mfg Co. (90.14)
Fabral Corporation
Intercontinental Alloys Corporation (50)
Luxfer USA Limited (50.01)

Bermuda

Alcan (Bermuda) Limited

Caribbean

Jamaica

Alcan Jamaica Limited
Alcan Products of Jamaica Limited
Sprotons (Jamaica) Limited

Trinidad

Chaguaramas Terminals Limited
Geddes Grant Sprotons Industries Limited (49)
Sprotons (Trinidad) Limited

Latin America

Argentina

Camea S.A. (35)

Brazil

Alcan Alumínio do Brasil S.A.
Alumínio do Brasil Nordeste S.A.
Mineração Rio do Norte S.A. (21.5)
Petrocoque S.A. (25.1)

Colombia

Alumínio Alcan de Colombia, S.A. (81)

Mexico

Alcan Alumínio, S.A. (60.9)

Uruguay

Alcan Alumínio del Uruguay S.A. (89.9)

Venezuela

Alcan de Venezuela, S.A.

Europe

Belgium

Alcan Aluminium Raeren S.A.

Denmark

Aluminord A.S. (25)†

France

Aluminium Alcan de France
Alcan-Schwartz, Filage et Oxydation (51)
S.A. des Bauxites et Alumines de Provence
Société Industrielle de Transformation et de Construction (SITRACO) (15)

Germany

Alcan Aluminiumwerke GmbH
Alcan Aluminiumwerk Nürnberg GmbH
Alcan Folien GmbH
Aluminiumfolienwerk GmbH
Aluminium Norf GmbH (50)
Cargo Van Fahrzeugwerk GmbH (50)

Ireland

Alcan Ireland Limited
Unidare Limited (25.5)

Italy

Alcan Alluminio Italiano S.p.A.
Alcan Angeletti & Ciucani Alluminio S.p.A.

Netherlands

Hunter Douglas N.V. (25)

Norway

Årdal og Sunndal Verk a.s. (Åsv) (25)
Nordisk Aluminium a.s. (25)†

Spain

Empresa Nacional del
Aluminio, S.A. (ENDASA) (25)
Productos Aluminio de Consumo, S.A. (62.5)

Sweden

Gränges Essem AB (20.84)

Switzerland

Aluminiumwerke A.-G. Rorschach

United Kingdom

Alcan Booth Industries Limited (75)
Alcan Booth Extrusions Limited (75)
Alcan Booth Sheet Limited (75)
Alcan Building Materials Limited (75)
Alcan Design Products Limited (56.25)
Alcan Ekco Limited (37.5)
Alcan Enfield Alloys Limited (50)
Alcan Foils Limited (75)
Alcan Metal Centres Limited (75)
Alcan Overhead Line Fittings Limited (75)
Alcan Polyfoil Limited (75)
Alcan (U.K.) Limited
Alcan Wire Limited (75)
Amari Limited (7.5)
Thomas Bennett Limited (56.2)
Bonallack Vehicles Limited (75)
Cargo Van Equipment Limited (50)
Freight Bonallack Limited (75)
Freight Development Company Limited (75)
Ian Proctor Metal Masts Limited (18)
Johnson & Bloy Aluminium Pigments Limited (27)
Luxfer Limited (50.01)
Minalex Limited (75)
E. C. Payter & Co. Limited (75)
Saguenay Shipping (U.K.) Limited
Serco-Ryan Limited (75)

Africa

Ghana

Ghana Aluminium Products Limited (60)

Guinea

Compagnie des Bauxites de Guinée (13.77)

Nigeria

Alcan Aluminium of Nigeria Limited (72.87)
Flag Aluminium Products Limited (65.22)

South Africa

Hulett's Aluminium Limited (24)
Silicon Smelters (Pty) Limited (33.33)

Asia

India

Indian Aluminium Company, Limited (55.27)

Indonesia

P.T. Alcan Indonesia (80)

Japan

Nippon Light Metal Company, Ltd (50)
Toyo Aluminium K.K. (50)

Malaysia

Aluminium Company of
Malaysia Berhad (34.48)
Johore Mining and Stevedoring
Co. Ltd (87.5)

Thailand

Alcan Thai Company Limited

South Pacific

Australia

Alcan Australia Limited (70)
Alcan Queensland Pty Limited
Queensland Alumina Limited (21.39)
Quintrex Enterprises Pty Limited (65.59)
Wm Breit & Company Pty Ltd (70)

New Zealand

Alcan New Zealand Limited (69.2)
Alcan Alloys Limited (69.2)
Alcan Anodisers Limited (69.2)
Alcan Cory Metals Limited (34.6)
Aluminium Anodisers (N.Z.) Ltd (34.6)
Aluminium Conductors Limited (35.3)
Barker Aluminium Windows Ltd (69.2)
Horizon Aluminium Products Ltd (34.6)
Rolls Holdings Ltd (29.1)

Holding and Financial

Alcan Aluminium (U.K.) Limited, London
Alcan Alumínio da America Latina, S.A.,
Rio de Janeiro
Alcan Europe N.V., Amsterdam
Alcan Finances Overseas N.V., Amsterdam

International Sales

Alcan Canada Products Limited
(Trading Division), Toronto — Canada
Alcan Alumínio (America Latina) Limited,
Montréal — Latin America
Alcan Asia Limited, Hong Kong — Hong Kong,
Japan, India and other areas of Asia
Alcan S.A., Zurich — Continental Europe
(excluding Germany and Scandinavia),
Near and Middle East, North Africa, U.S.S.R.
Alcan Metall GmbH, Frankfurt — Germany
Alcan (U.K.) Limited, London — U.K., Ireland,
Scandinavia
Alcan Sales (Division of Alcan Aluminum
Corporation), Cleveland — U.S.A. and
Caribbean
Alcan Project Services Limited, Montréal
Engineering and feasibility studies
related to the aluminum industry
Alcan Trading Limited, Montréal — Worldwide;
magnesium and other metals

†Subsidiary of Årdal og Sunndal Verk a.s. (Åsv)

Directors

Erik Brofoss

Oslo — Chairman of the Norwegian Regional Development Fund, an agency of the Norwegian Government

James W. Cameron

Montréal — Regional Executive Vice President until 31 January 1977

David M. Culver

Montréal — Regional Executive Vice President

Nathanael V. Davis

Montréal — Chairman of the Board and Chief Executive Officer

P. John Elton

London — Chairman of Alcan Aluminium (U.K.) Limited

John H. Hale

Montréal — Executive Vice President

The Rt. Hon.

Viscount Harcourt, K.C.M.G., O.B.E.

London — Chairman of Legal and General Assurance Society Limited, an insurance company

James T. Hill, Jr

New York — Director of various companies

Paul H. Leman, O.C.

Montréal — President

Louis Rasminsky, C.C., C.B.E.

Ottawa — Chairman of the International Development Research Centre, an agency of the Canadian Government

Patrick J. J. Rich

Montréal — Regional Executive Vice President

Hon. James Sinclair, P.C.

Vancouver — Chairman of Lafarge Canada Ltd, manufacturers of cement and related products

Eric A. Trigg

Montréal — Regional Executive Vice President

William O. Twaits, C.C.

Toronto — Director of various companies

Eric F. West

Cleveland — President of Alcan Aluminum Corporation

Officers

Nathanael V. Davis

Chairman of the Board and Chief Executive Officer

Paul H. Leman, O.C.

President

David M. Culver

Regional Executive Vice President, Canada, U.S.A. and Caribbean

Patrick J. J. Rich

Regional Executive Vice President, Europe, Near East, Africa and Latin America

John H. Hale

Executive Vice President, Finance

Eric A. Trigg

Regional Executive Vice President, Middle East, Asia and South Pacific

F. G. Barker

Vice President, Engineering and Technology

Duncan C. Campbell

Vice President, Public Affairs

H. Stewart Ladd

Vice President, Personnel

A. A. Bruneau

Secretary

T. F. D. Simmons

Treasurer

Audit Committee

John H. Hale, Chairman
Erik Brofoss
The Rt. Hon. Viscount Harcourt, K.C.M.G., O.B.E.

Personnel Committee

Nathanael V. Davis, Chairman
James T. Hill, Jr
Paul H. Leman, O.C.
Louis Rasminsky, C.C., C.B.E.
Hon. James Sinclair, P.C.
William O. Twaits, C.C.

Area General Managers

Canada, Fabricating and Sales:
Harold Corrigan, Toronto
Canada, Smelting and Chemicals:
Roger Phillips, Montréal
Caribbean: J. J. Gagnon, Mandeville, Jamaica
United States: Eric F. West, Cleveland
Latin America: A. F. Black, Rio de Janeiro
United Kingdom, Ireland and Scandinavia: D. A. Pinn, London
Continental Europe:
Ihor Suchoversky, Geneva
Far East: David H. Clarke, Hong Kong
India: D. A. Corbett-Thompson, Calcutta
South Pacific: J. B. Clarkson, Sydney



Alcan Aluminium Limited

1 Place Ville Marie, Montréal, Canada
Mail Box 6090, Montréal, Canada
H3C 3H2